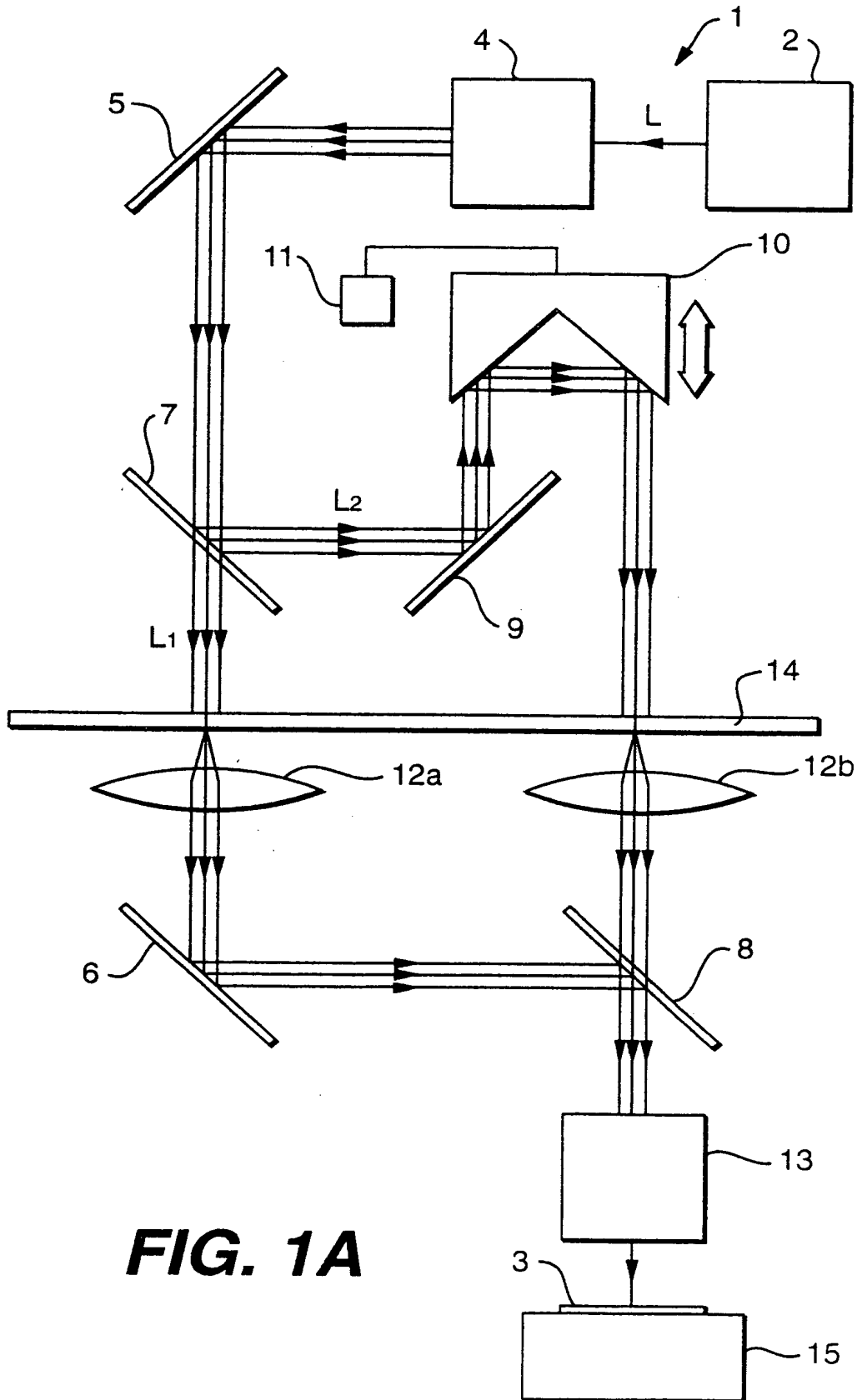


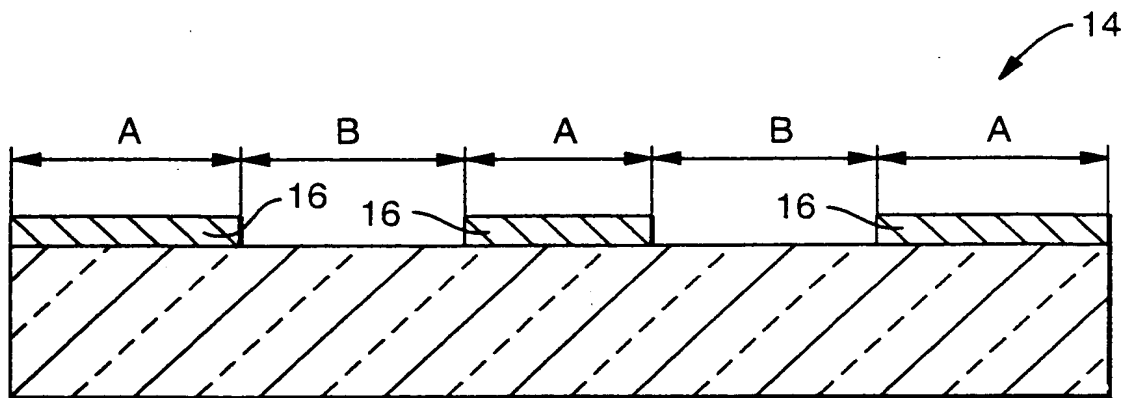
APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
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09/922,656

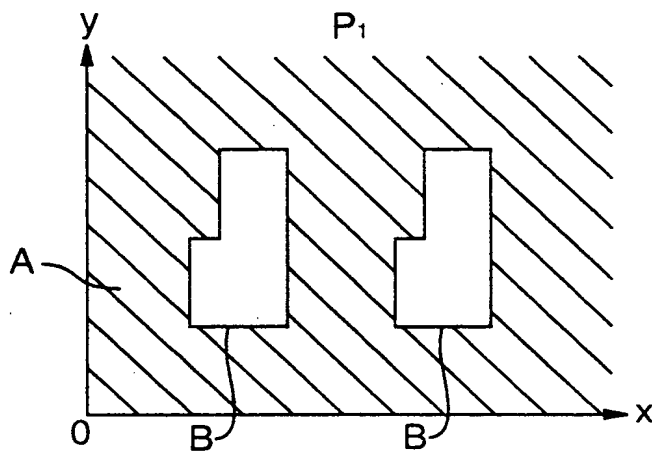


**FIG. 1A**

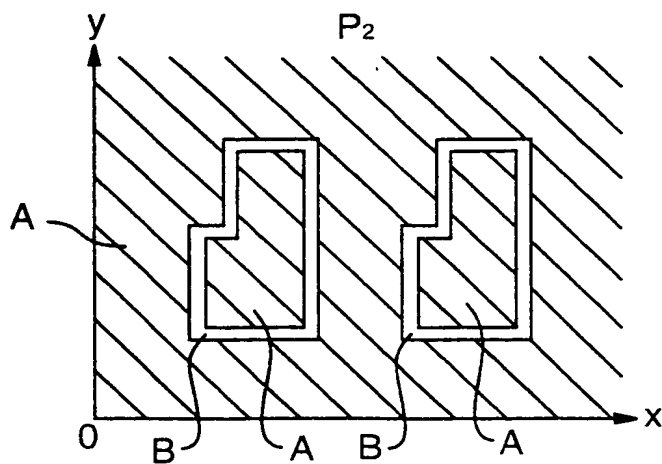
APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
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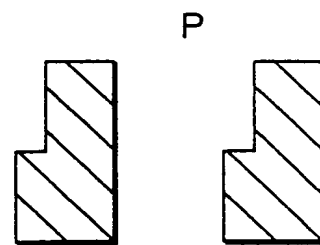
**FIG. 1B**



**FIG. 1C-1**

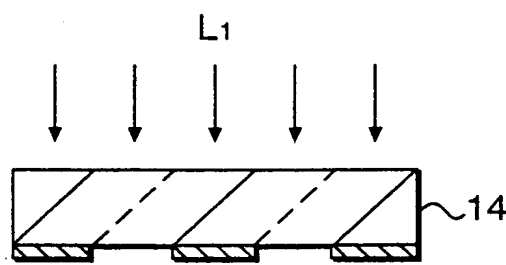


**FIG. 1C-2**

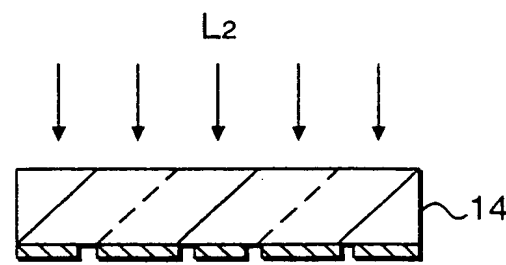


**FIG. 1C-3**

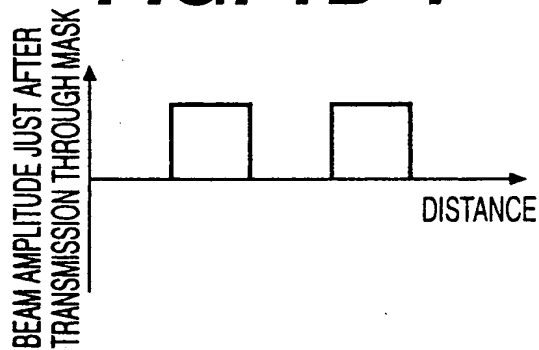
**FIG. 1D-1**



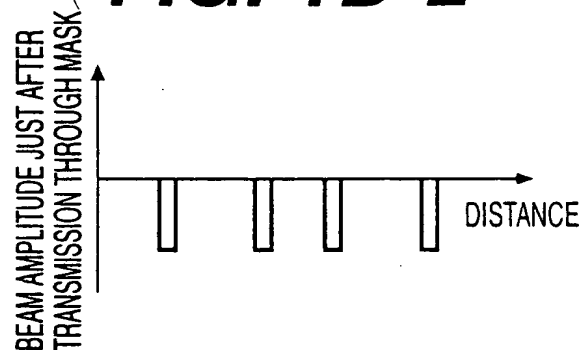
**FIG. 1D-2**



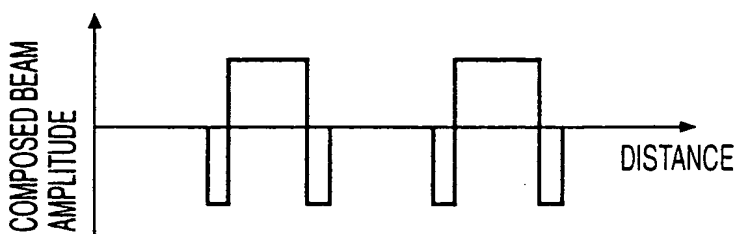
**FIG. 1D-1'**



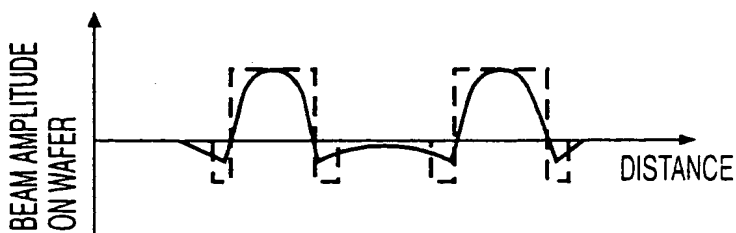
**FIG. 1D-2'**



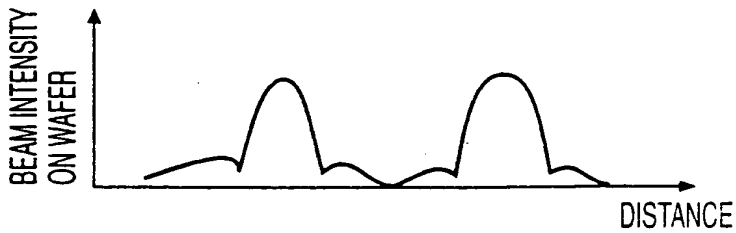
**FIG. 1D-3**



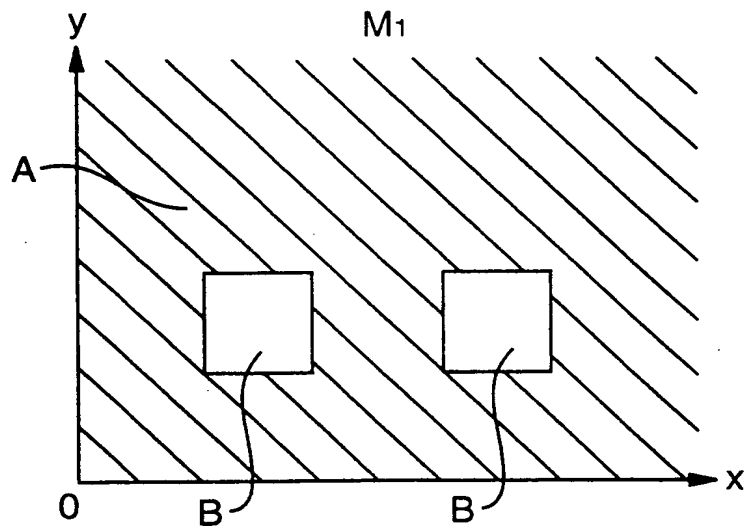
**FIG. 1D-4**



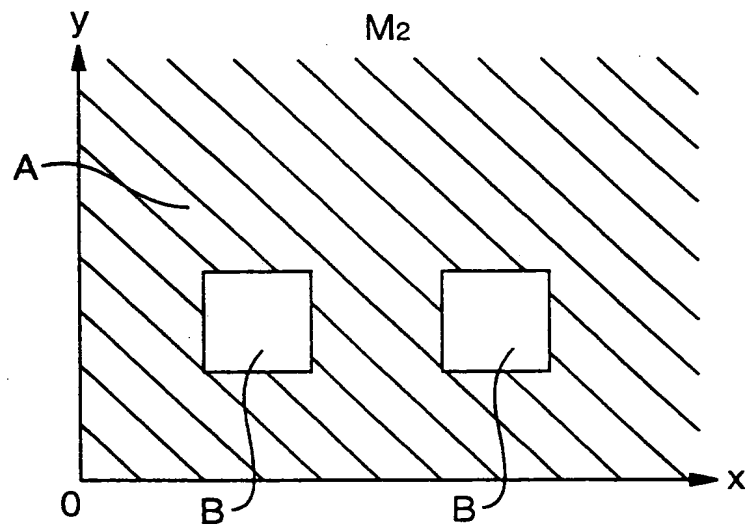
**FIG. 1D-5**



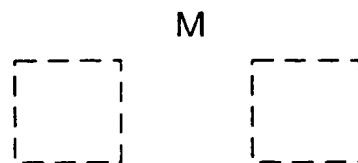
APPROVED	O.G. FIG.	
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**FIG. 1E-1**

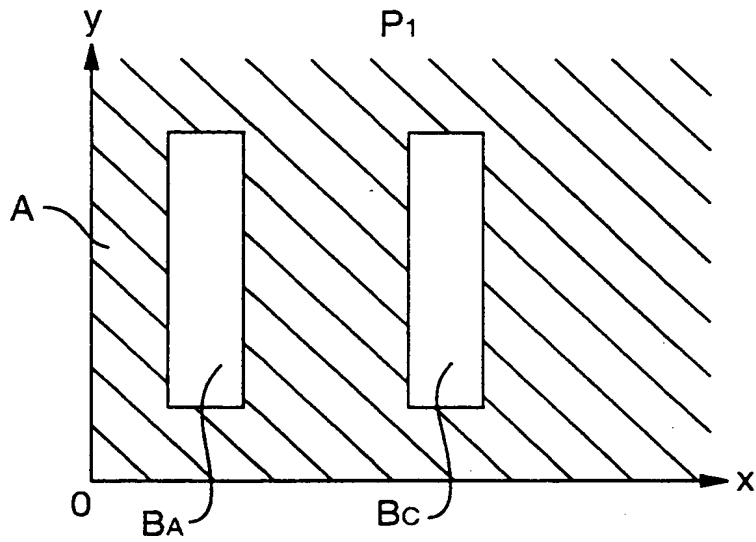


**FIG. 1E-2**

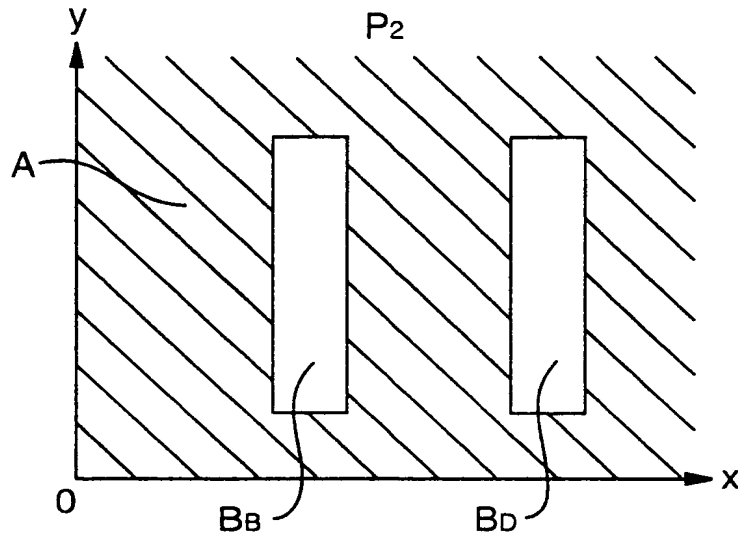


**FIG. 1E-3**

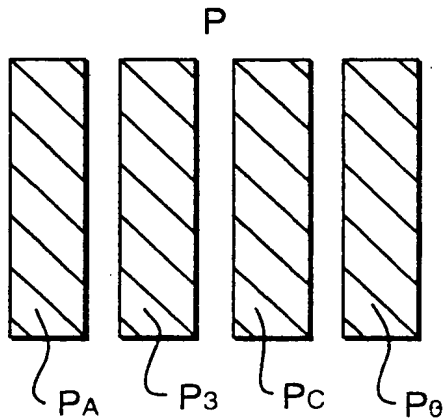
APPROVED	O.G. FIG.	
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**FIG. 1F-1**



**FIG. 1F-2**



**FIG. 1F-3**

APPROVED	O.G. FIG.	
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FIG. 1G-1

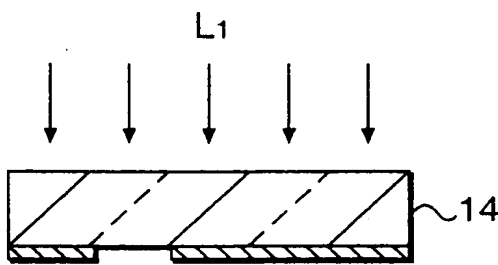


FIG. 1G-2

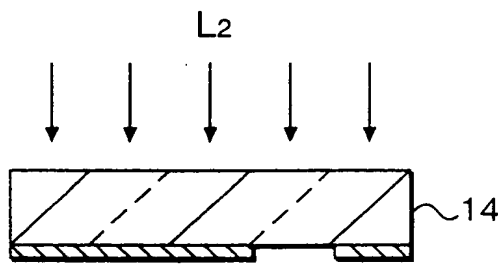


FIG. 1G-1'

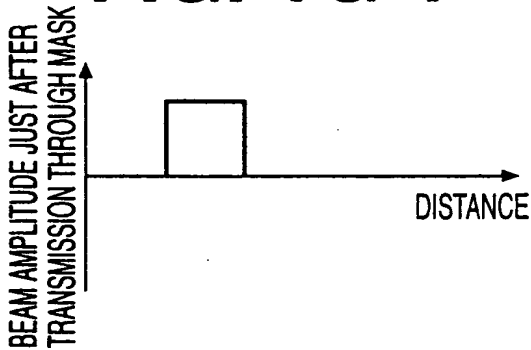


FIG. 1G-2'

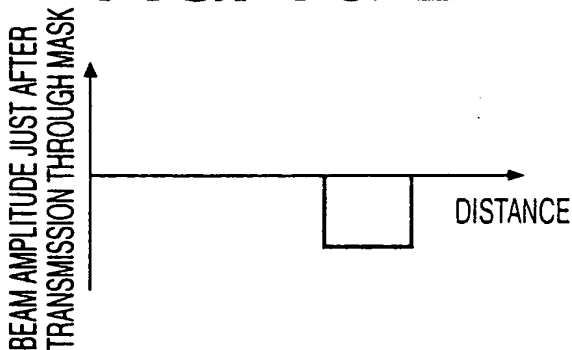


FIG. 1G-3

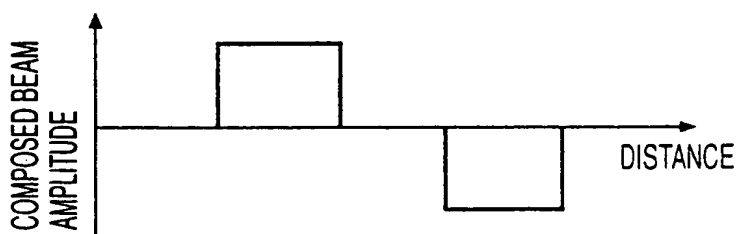


FIG. 1G-4

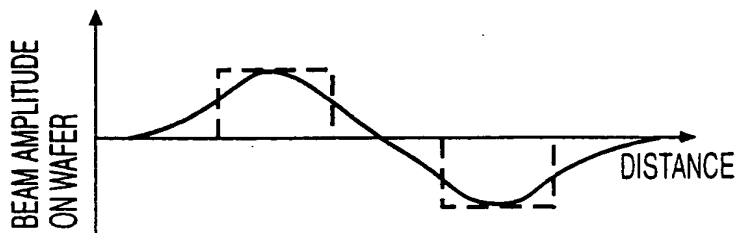
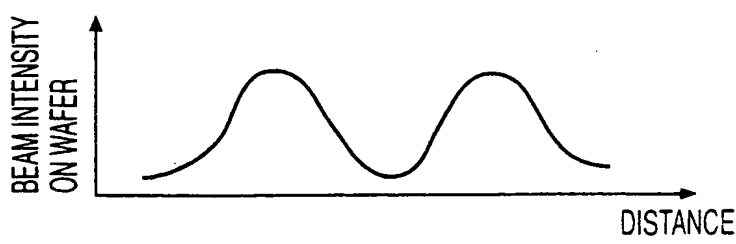
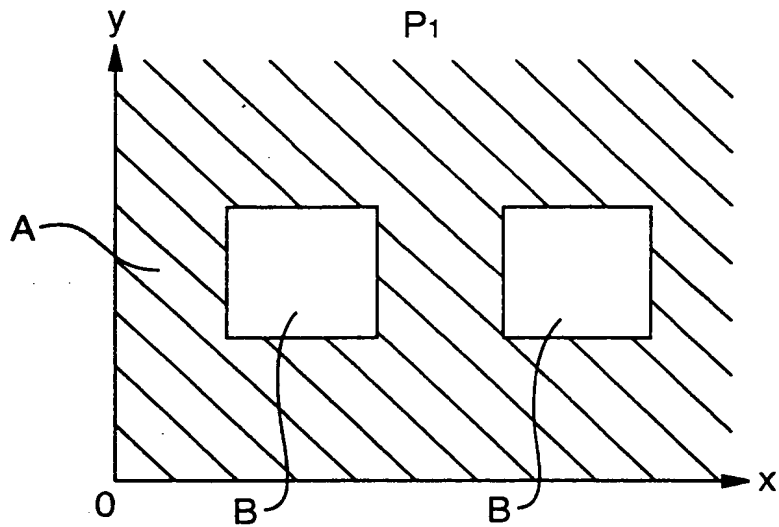


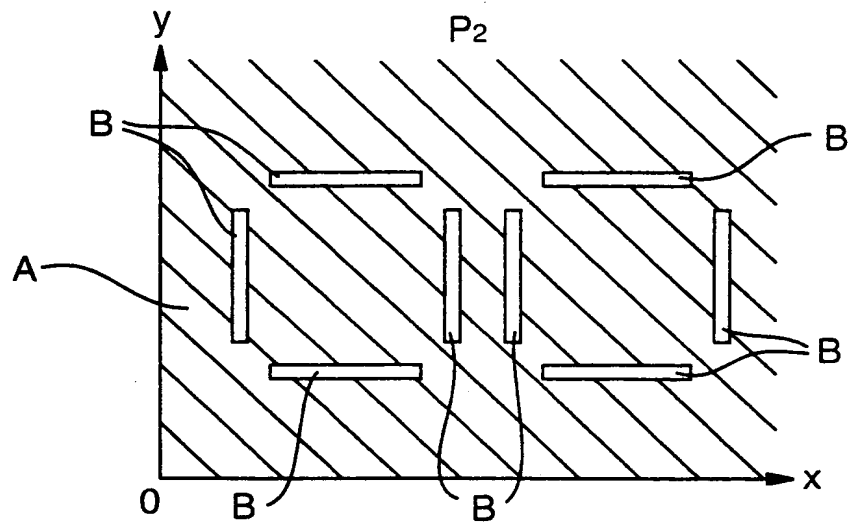
FIG. 1G-5



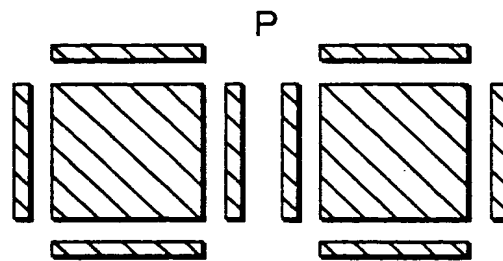
APPROVED	O.G. FIG.	
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**FIG. 1H-1**



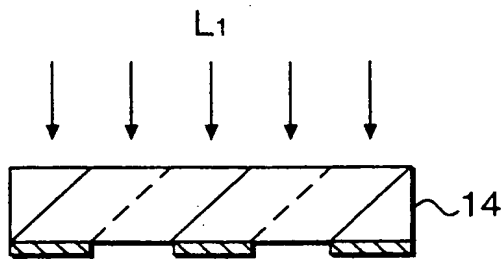
**FIG. 1H-2**



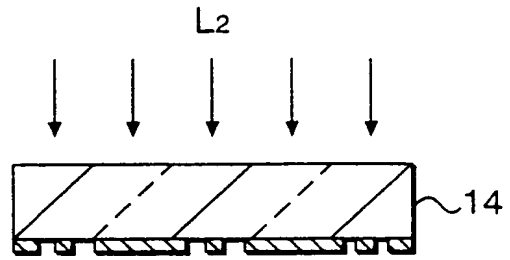
**FIG. 1H-3**

APPROVED	O.G. FIG.	
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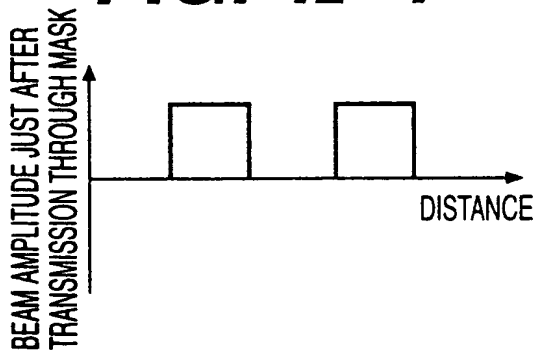
**FIG. 1I-1**



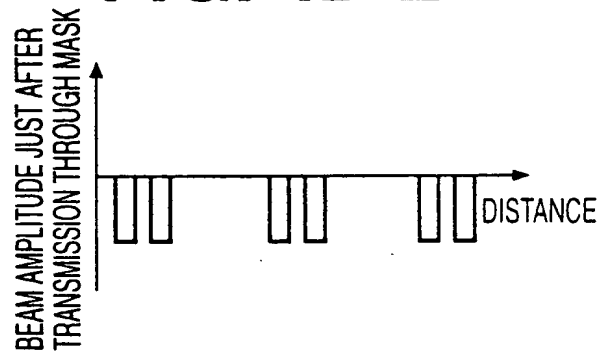
**FIG. 1I-2**



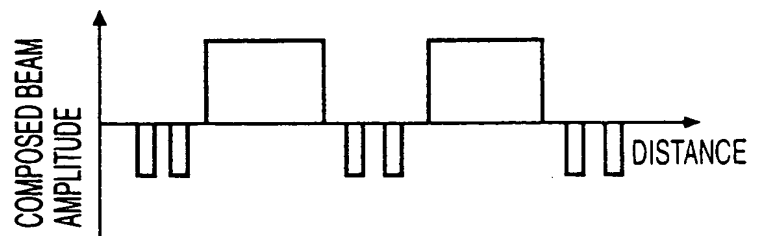
**FIG. 1I-1'**



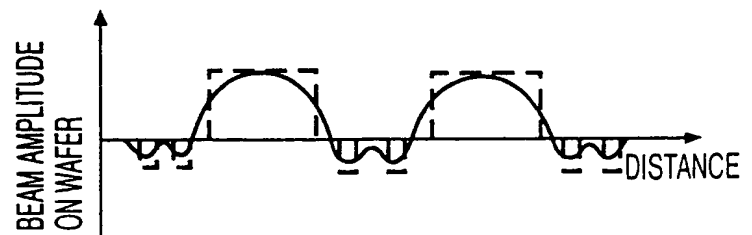
**FIG. 1I-2'**



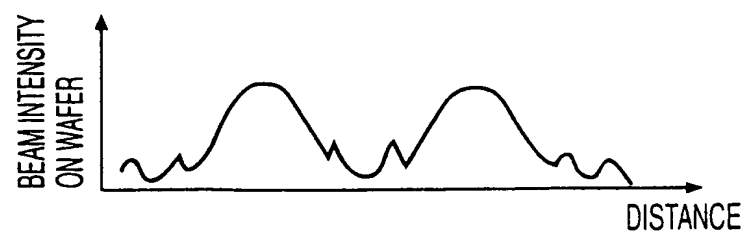
**FIG. 1I-3**



**FIG. 1I-4**



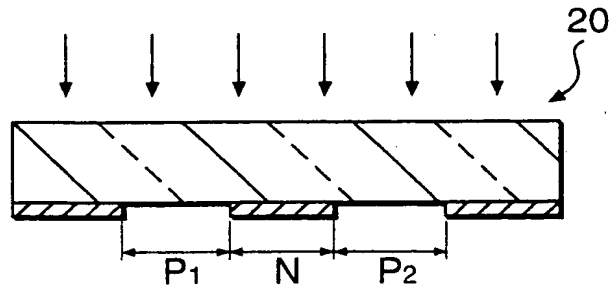
**FIG. 1I-5**



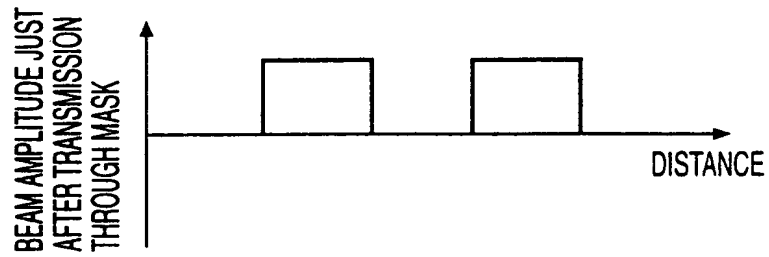


APPROVED	O.G. FIG.	
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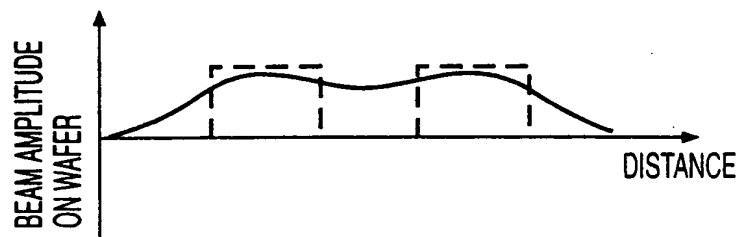
**FIG. 1J-1**



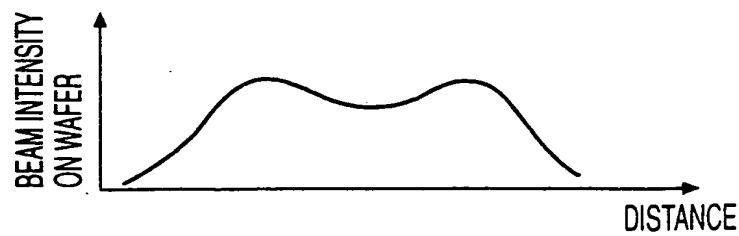
**FIG. 1J-2**



**FIG. 1J-3**

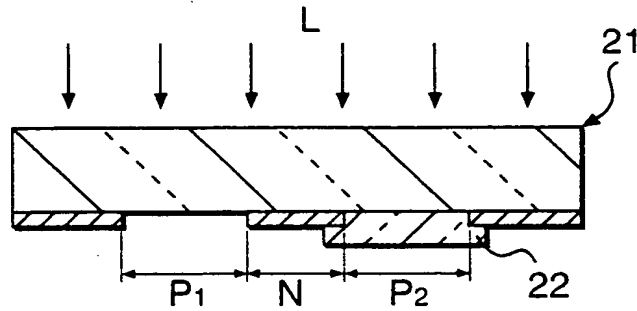


**FIG. 1J-4**

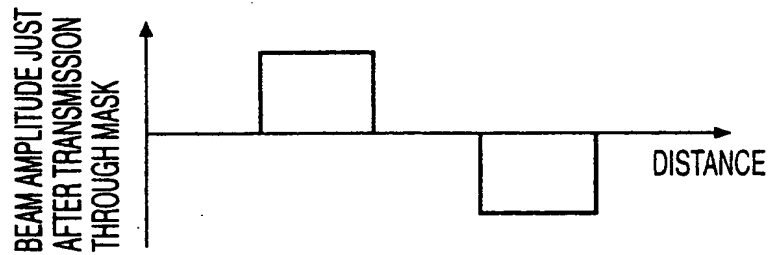


APPROVED	O.G. FIG.	
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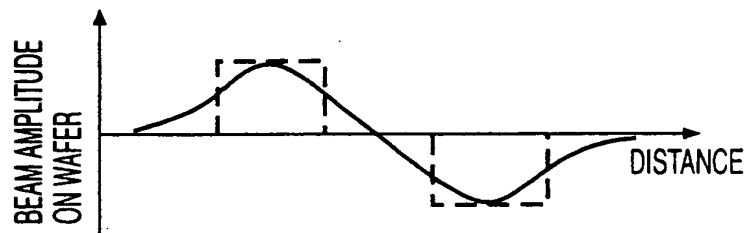
**FIG. 1K-1**



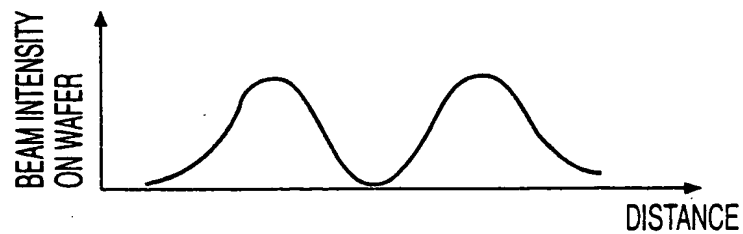
**FIG. 1K-2**



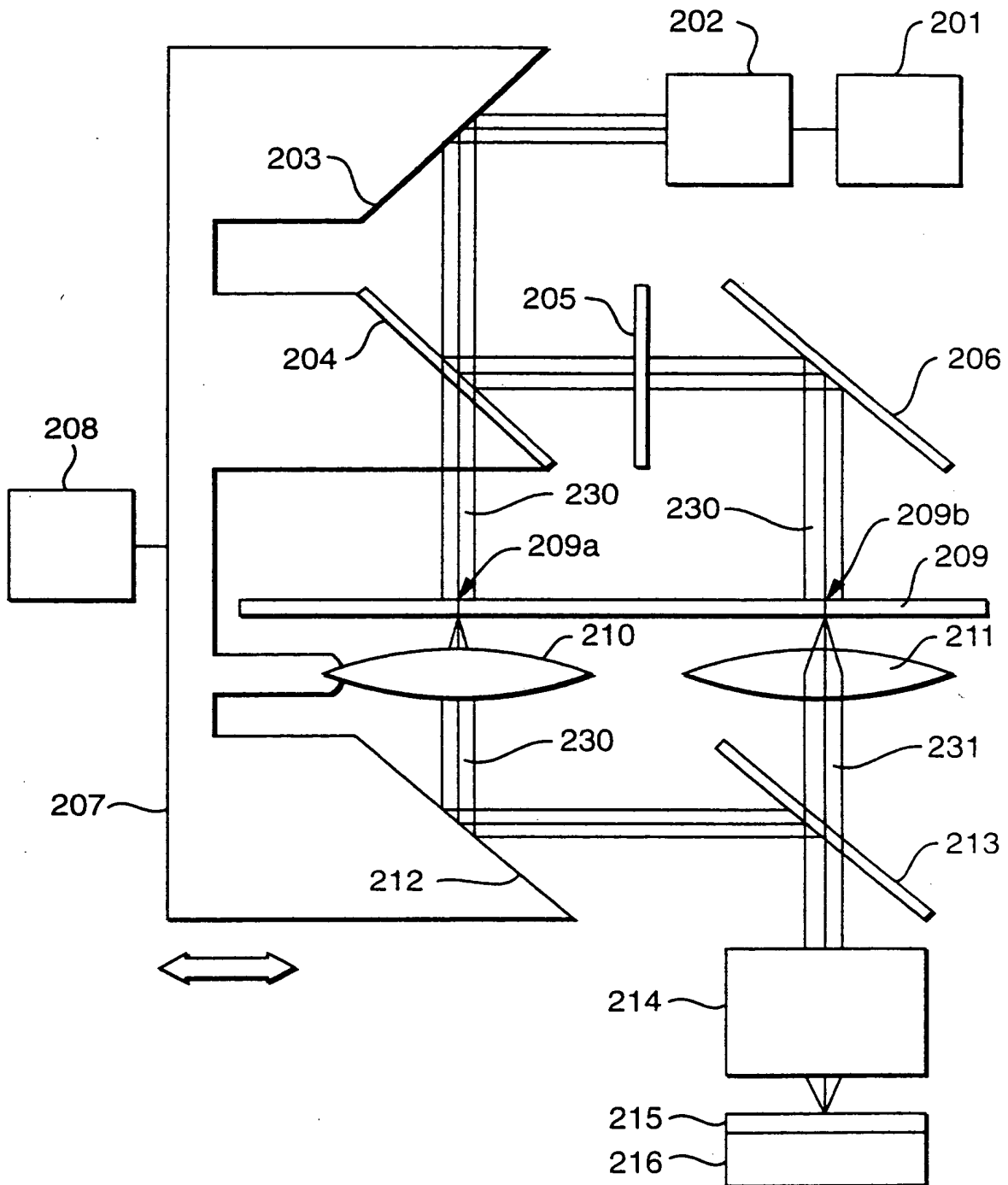
**FIG. 1K-3**



**FIG. 1K-4**

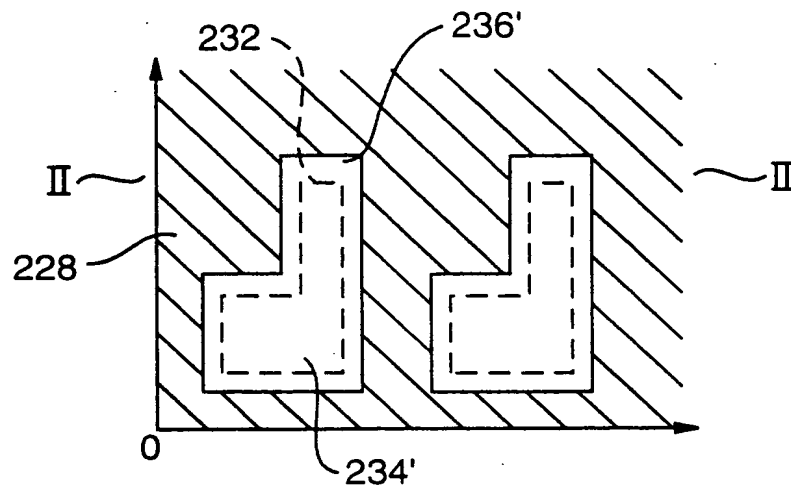


APPROVED	O.G. FIG.	
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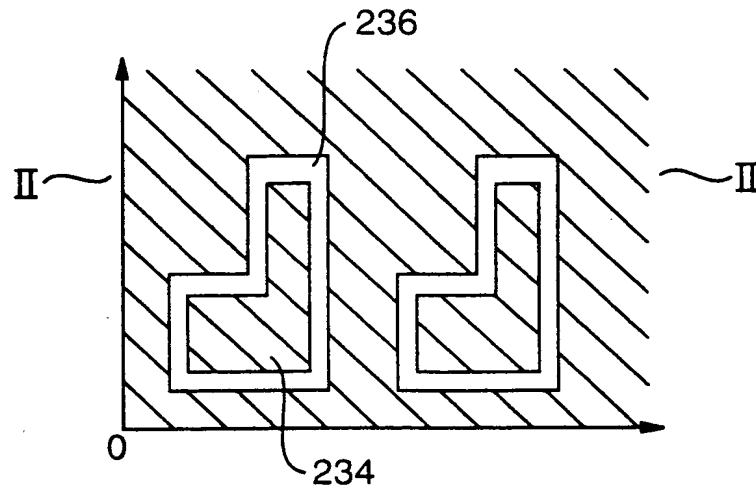


**FIG. 2A**

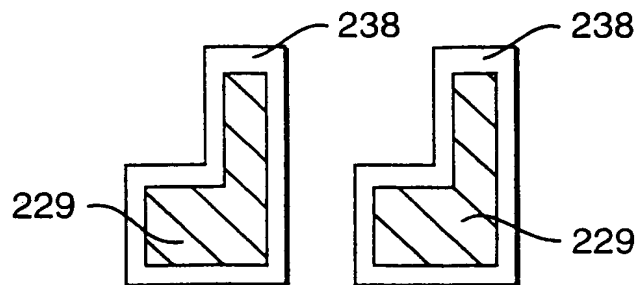
APPROVED	O.G. FIG.	
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**FIG. 2B-1**

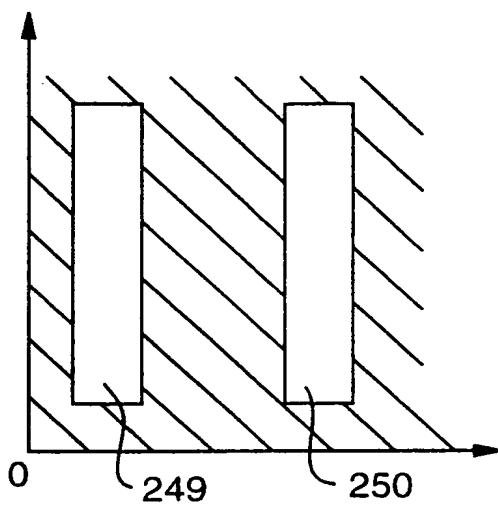


**FIG. 2B-2**

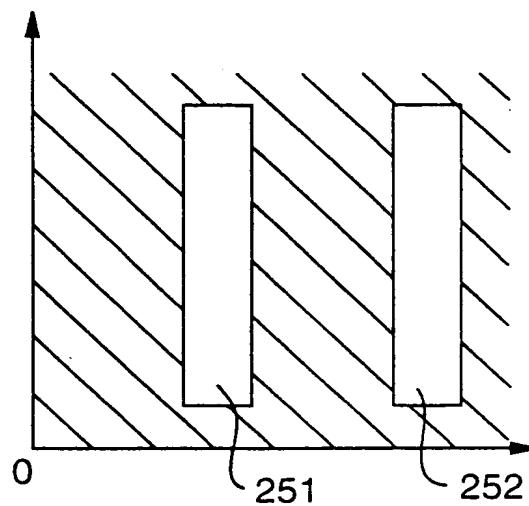


**FIG. 2B-3**

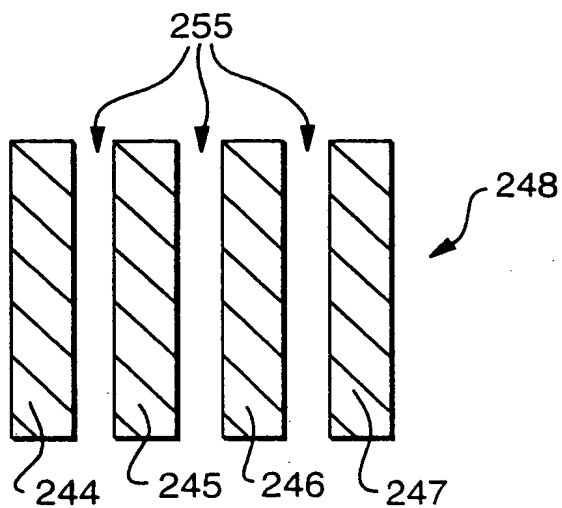
APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
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**FIG. 2C-1**

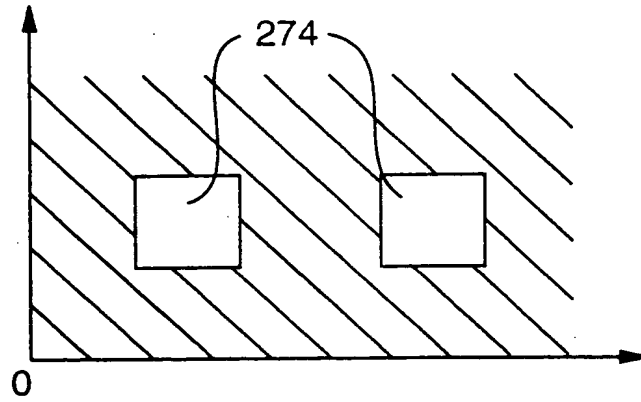


**FIG. 2C-2**

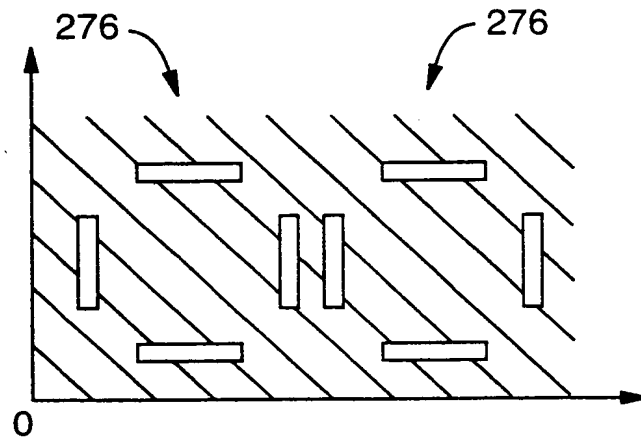


**FIG. 2C-3**

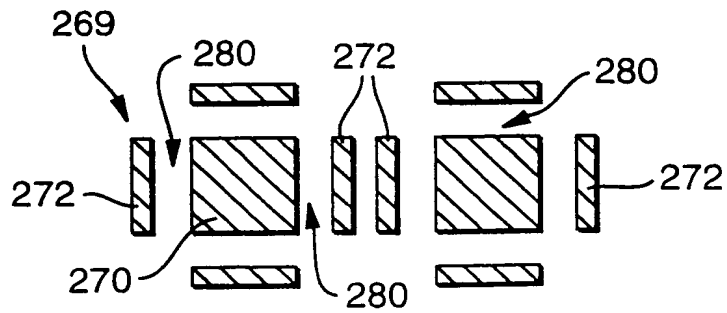
APPROVED	O.G. FIG.	
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**FIG. 2D-1**



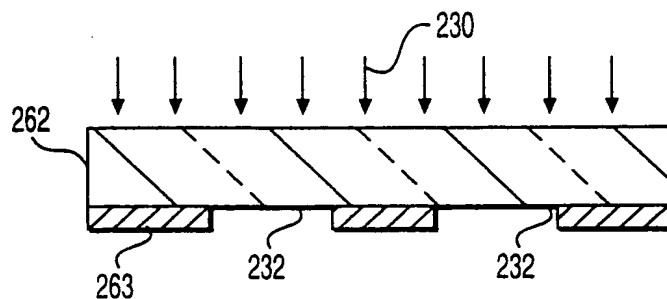
**FIG. 2D-2**



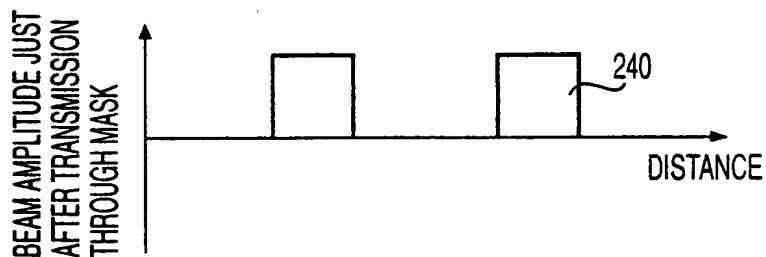
**FIG. 2D-3**

APPROVED	O.G. FIG.	
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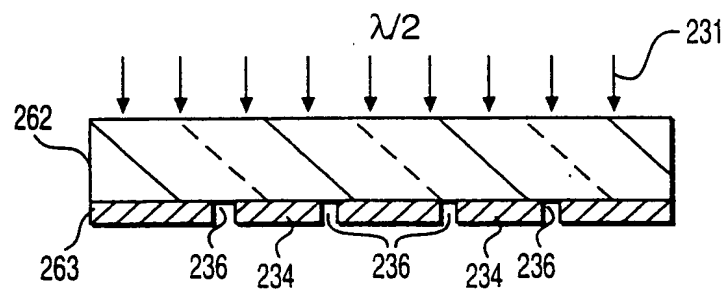
**FIG. 2E-1**



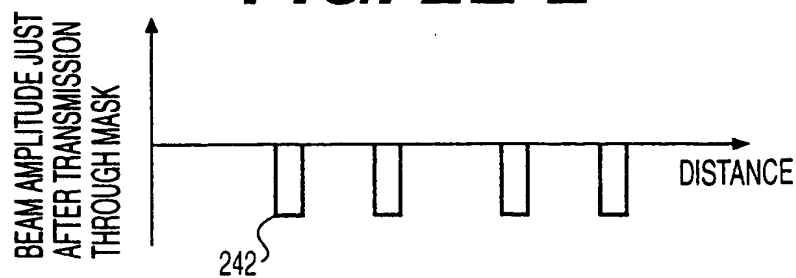
**FIG. 2E-1'**



**FIG. 2E-2**

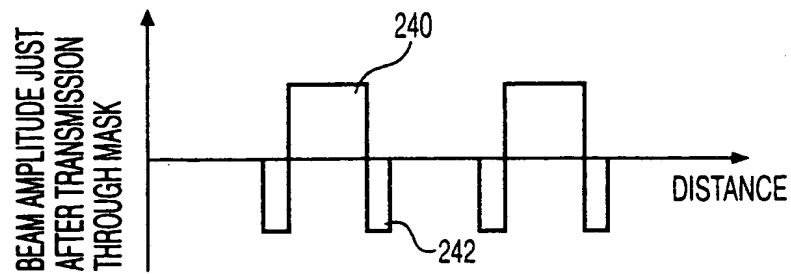


**FIG. 2E-2'**

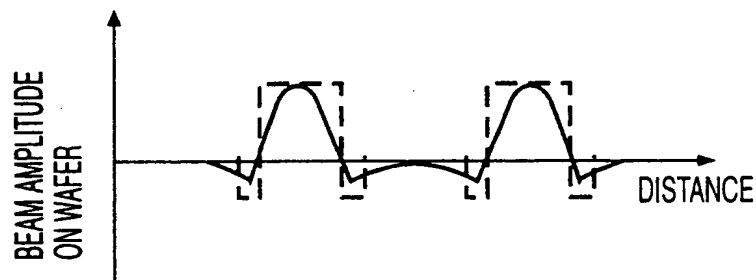


APPROVED	O.G. FIG.	
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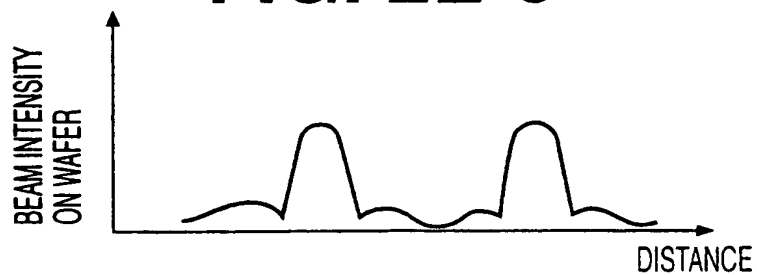
**FIG. 2E-3**



**FIG. 2E-4**



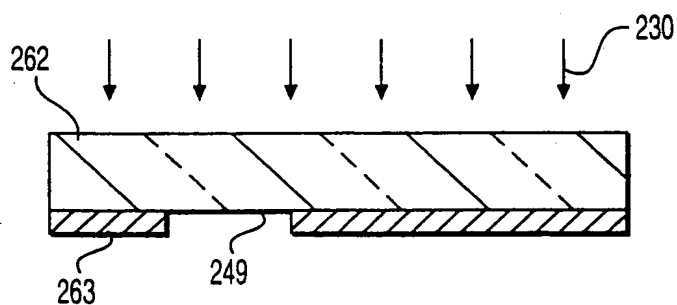
**FIG. 2E-5**



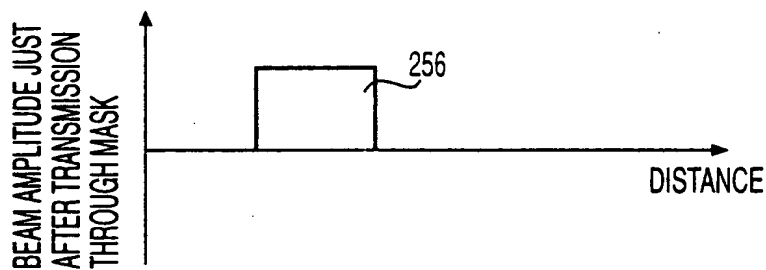


APPROVED	O.G. FIG.	
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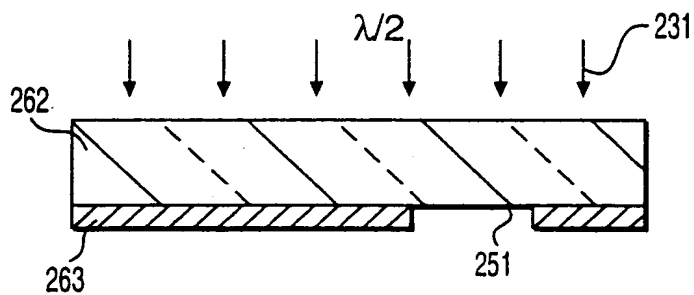
**FIG. 2F-1**



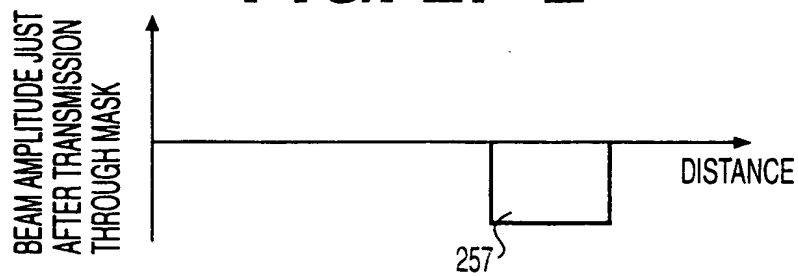
**FIG. 2F-1'**



**FIG. 2F-2**



**FIG. 2F-2'**



APPROVED	O.G. FIG.	
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FIG. 2F-3

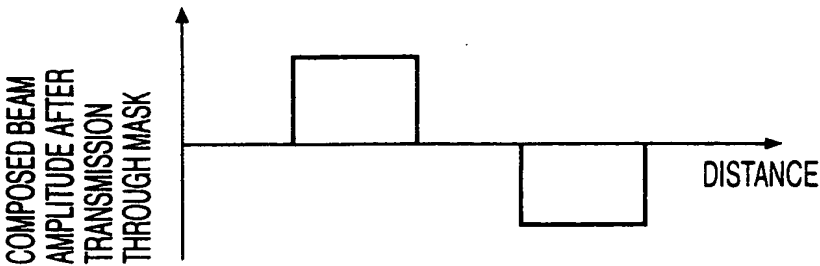


FIG. 2F-4

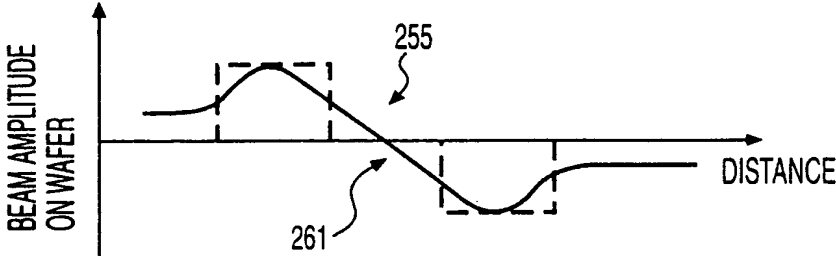


FIG. 2F-4'

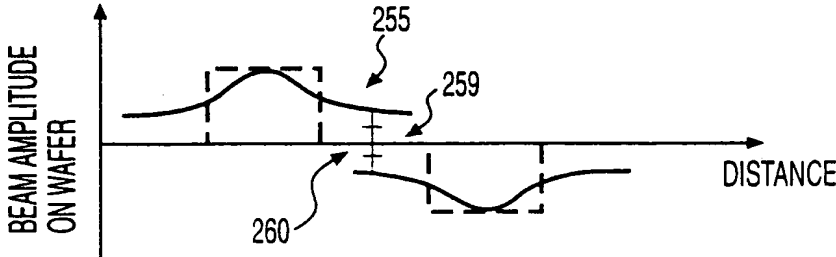
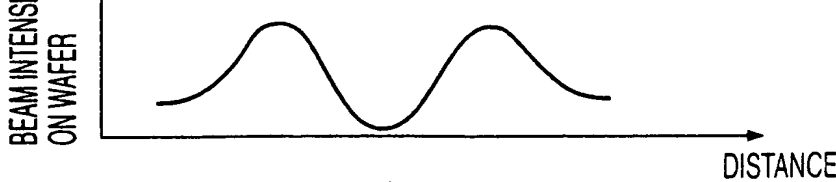
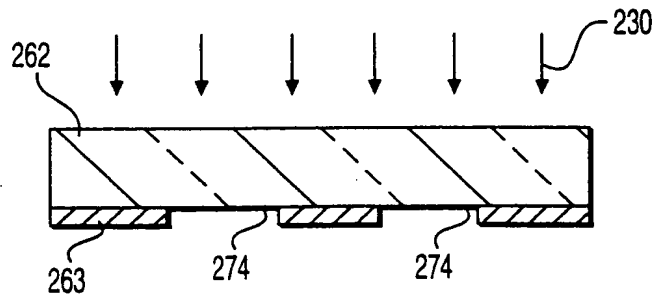


FIG. 2F-5

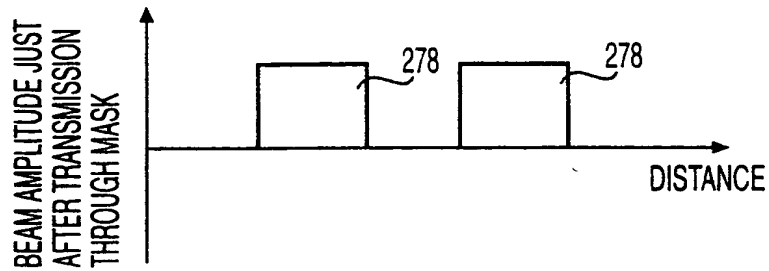


APPROVED	O.G. FIG.	
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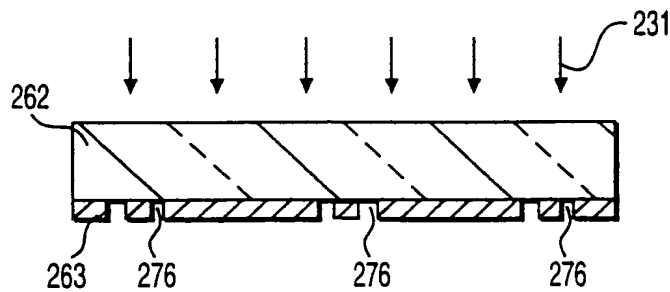
**FIG. 2G-1**



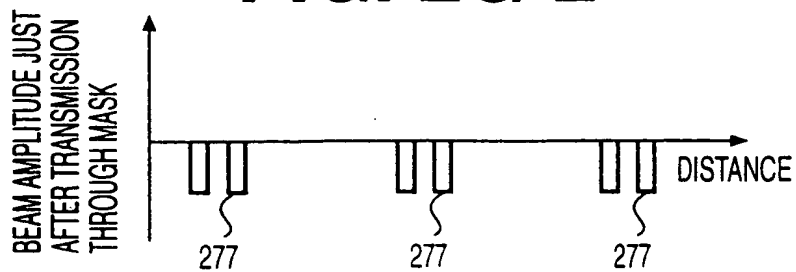
**FIG. 2G-1'**



**FIG. 2G-2**

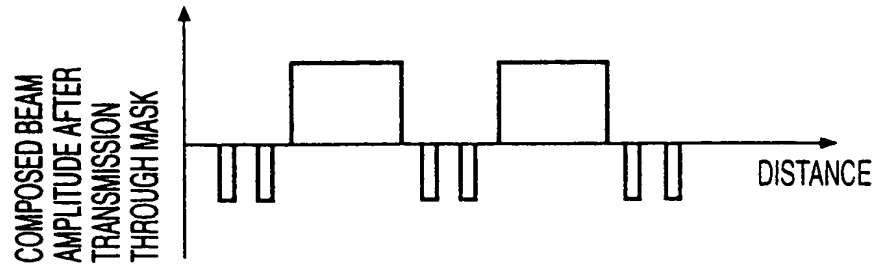


**FIG. 2G-2'**

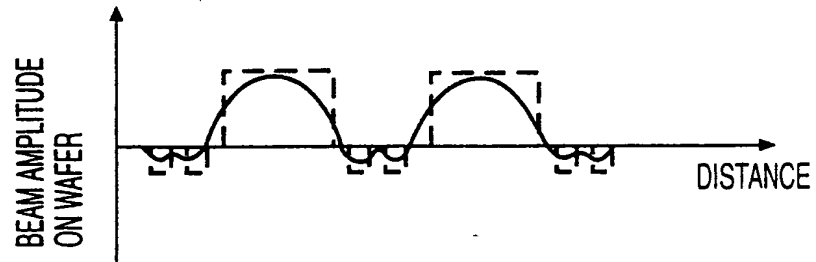


APPROVED	O.G. FIG.	
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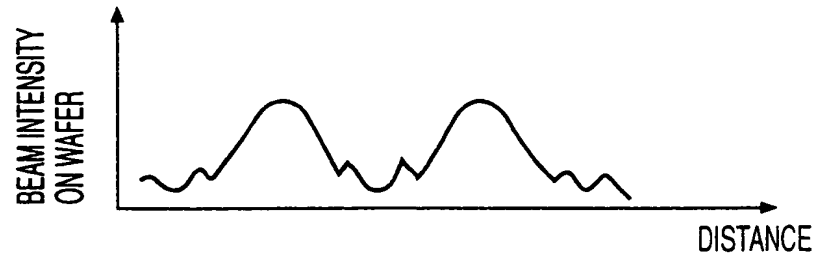
**FIG. 2G-3**



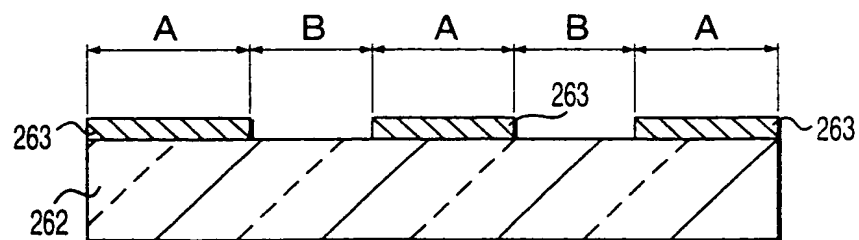
**FIG. 2G-4**



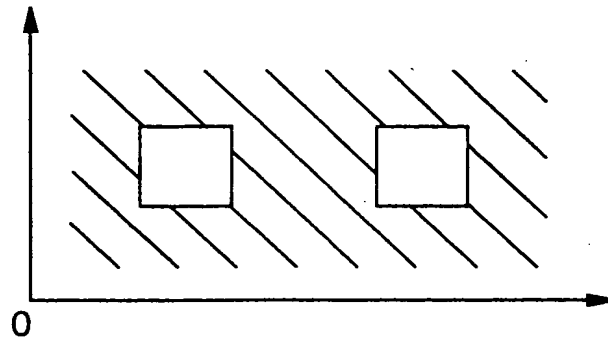
**FIG. 2G-5**



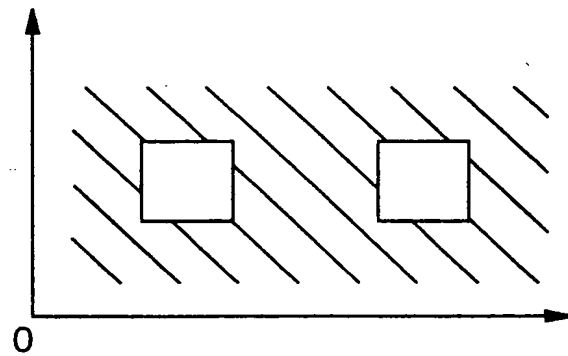
**FIG. 2H**



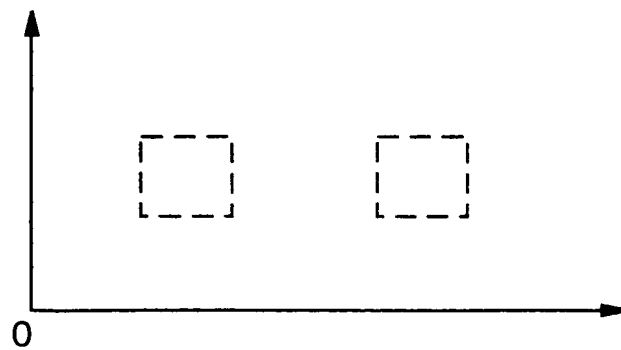
APPROVED	O.G. FIG.	
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***FIG. 2I-1***

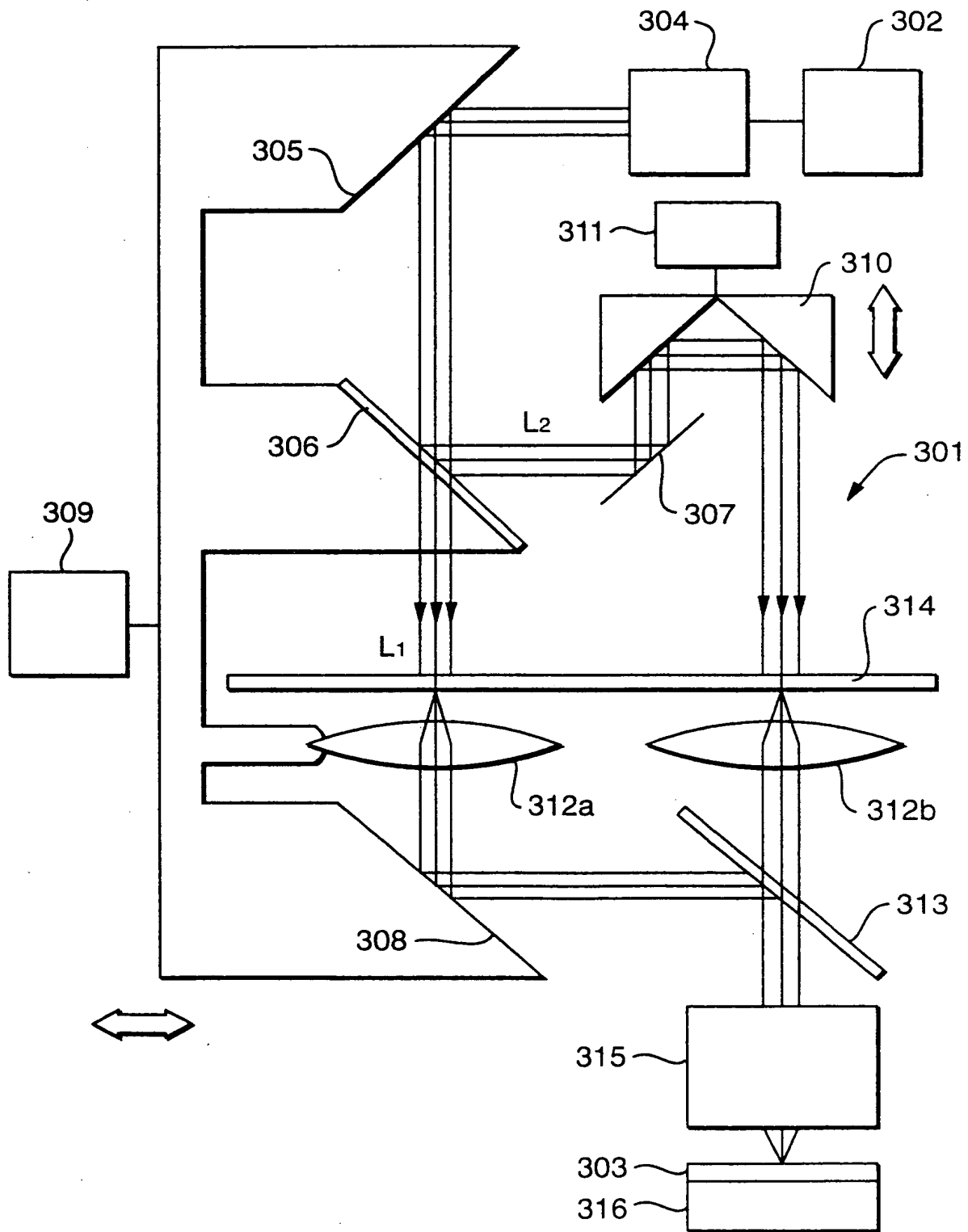


***FIG. 2I-2***



***FIG. 2I-3***

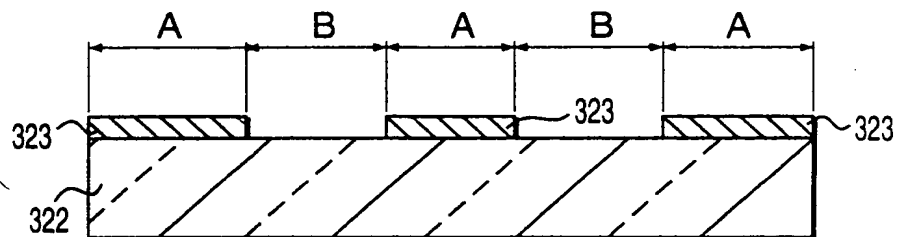
APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		



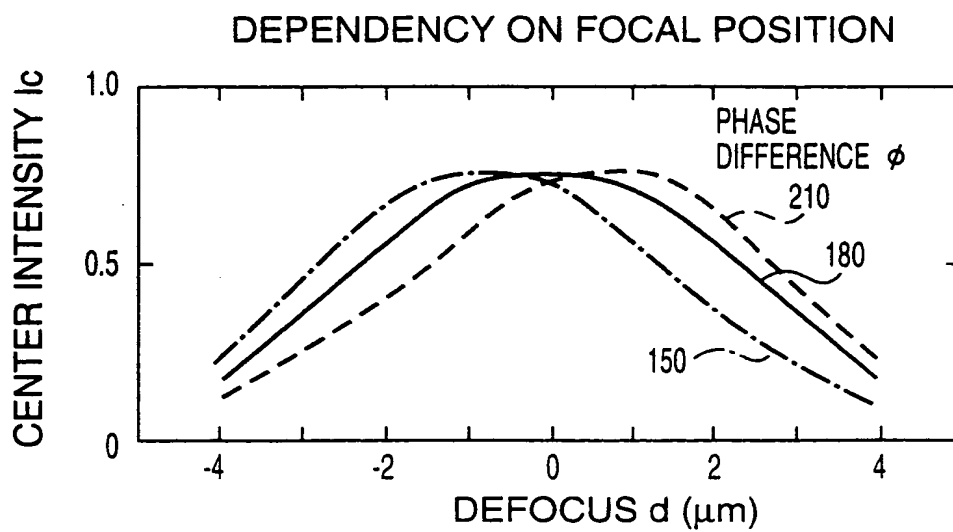
**FIG. 3A**

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

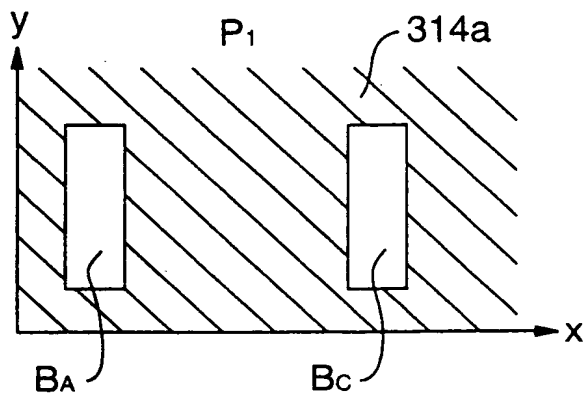
**FIG. 3B**



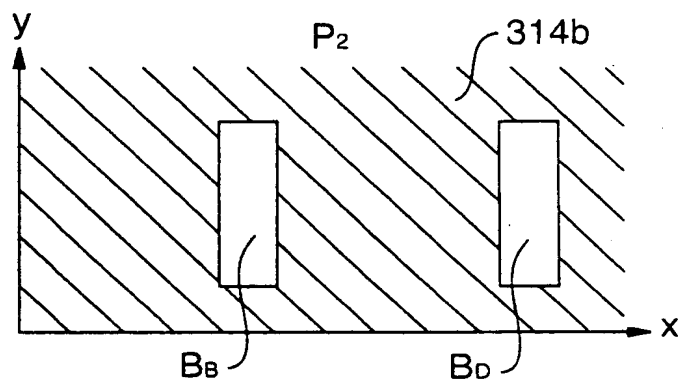
**FIG. 3D**



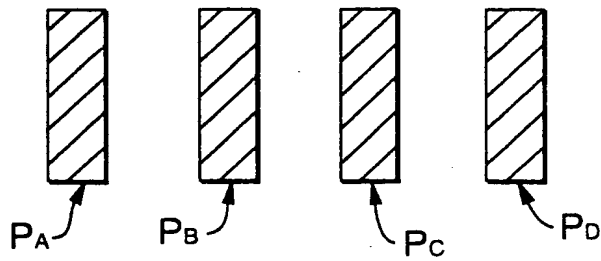
APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		



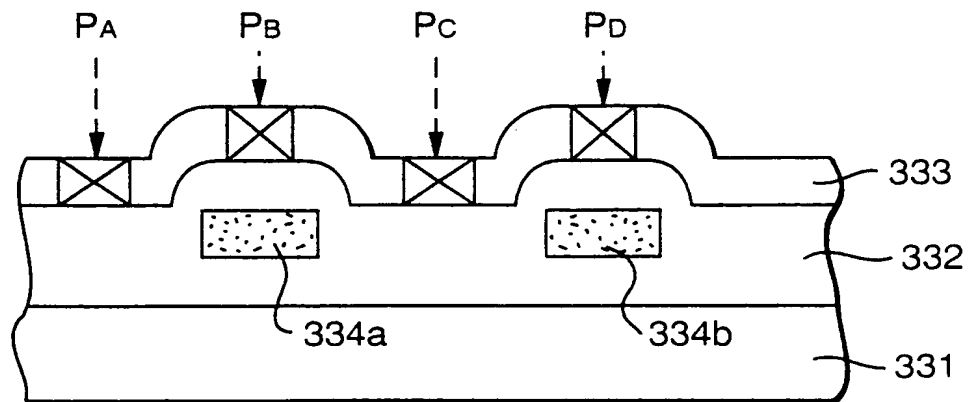
**FIG. 3C-1**



**FIG. 3C-2**



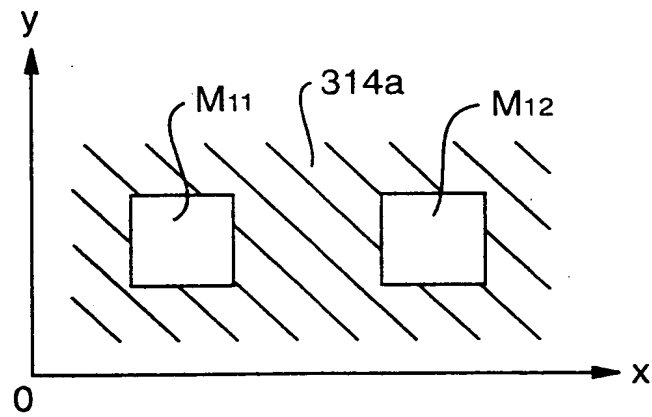
**FIG. 3C-3**



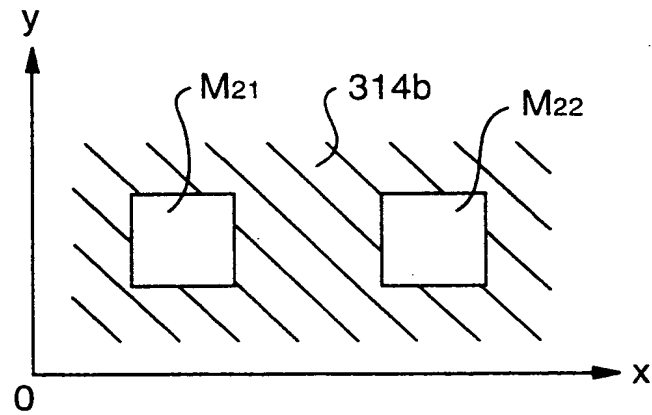
**FIG. 3C-4**



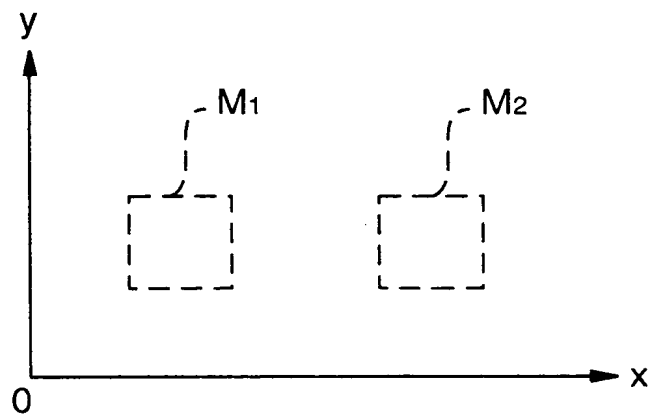
APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		



**FIG. 3E-1**

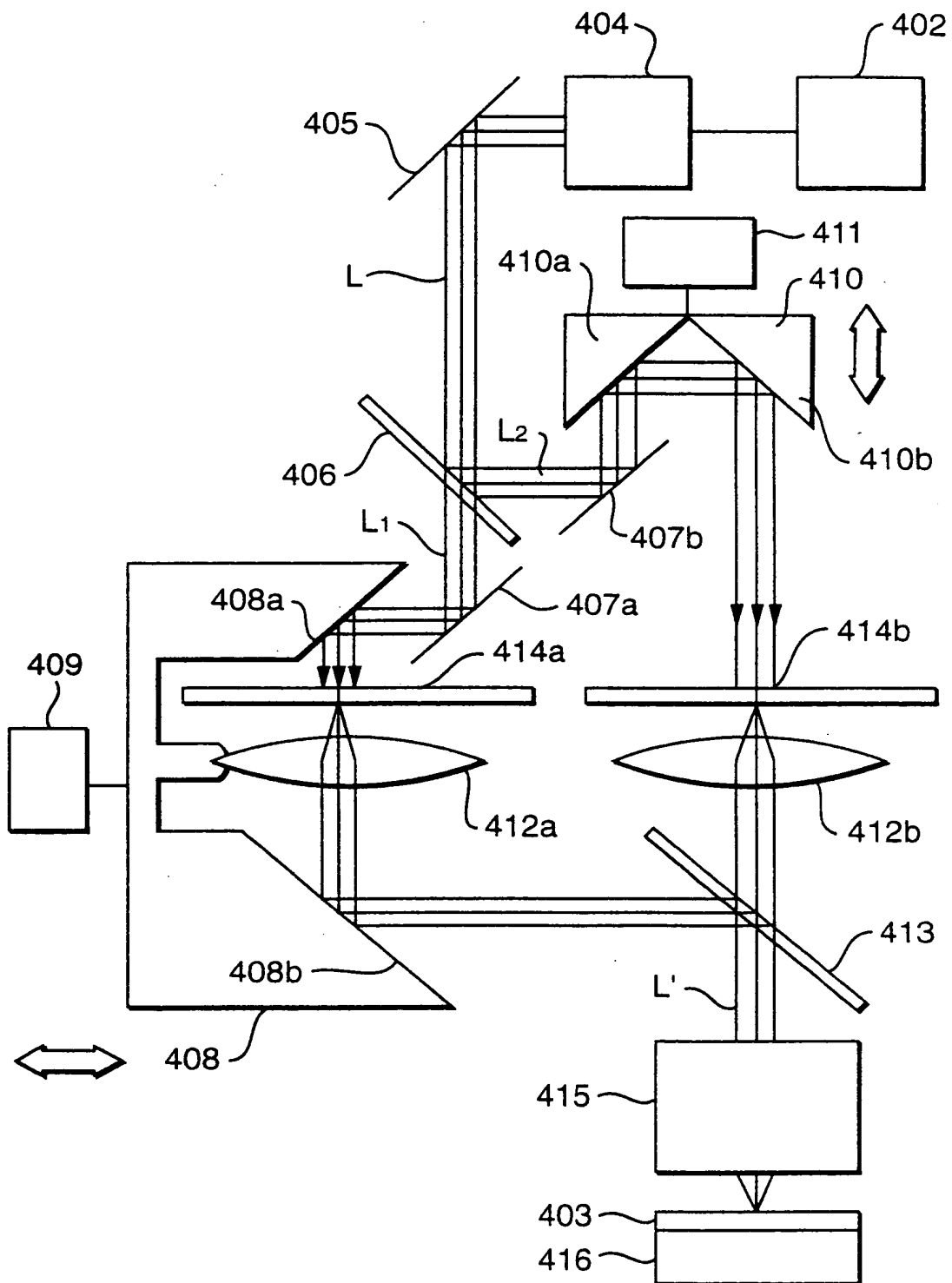


**FIG. 3E-2**



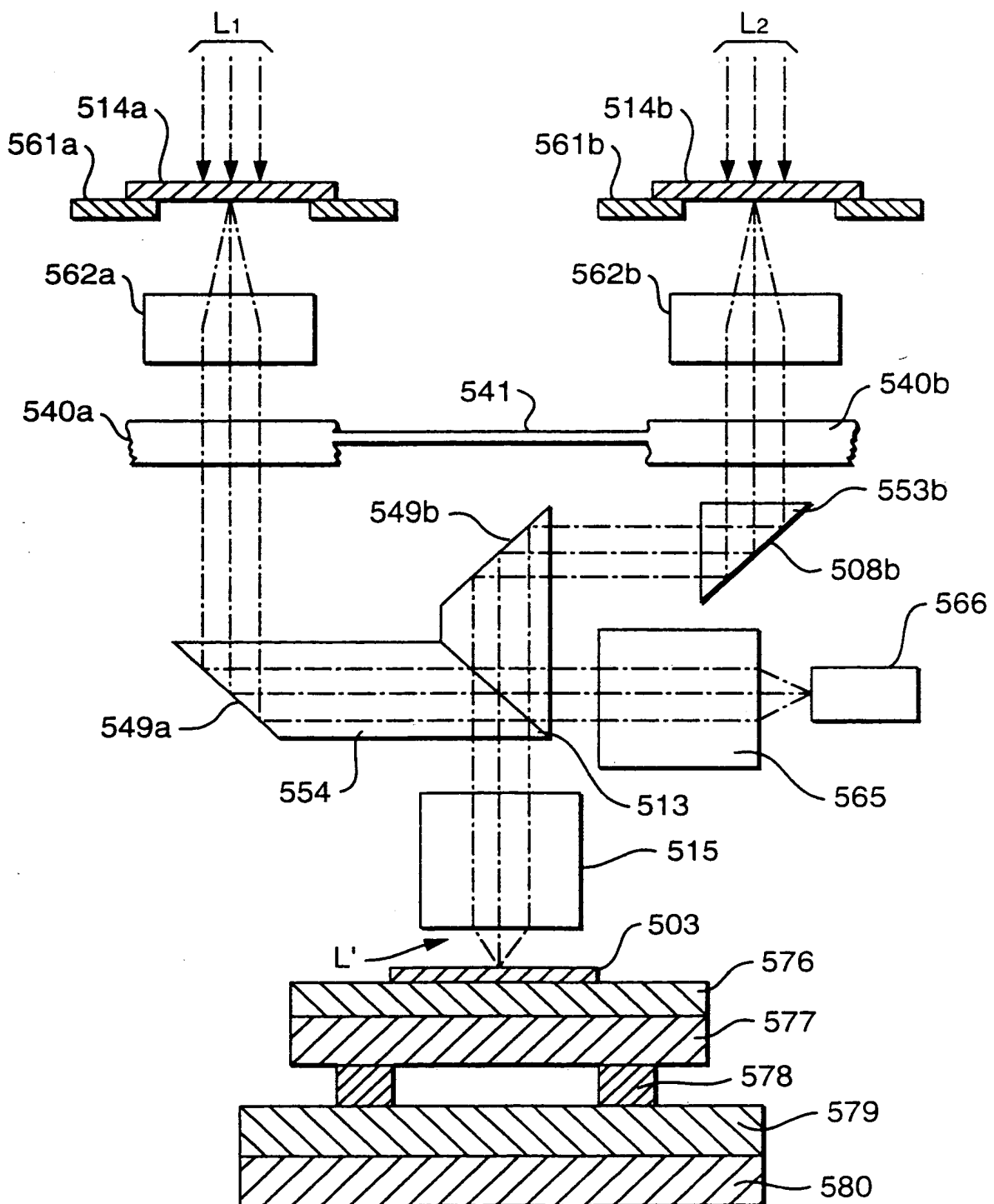
**FIG. 3E-3**

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		



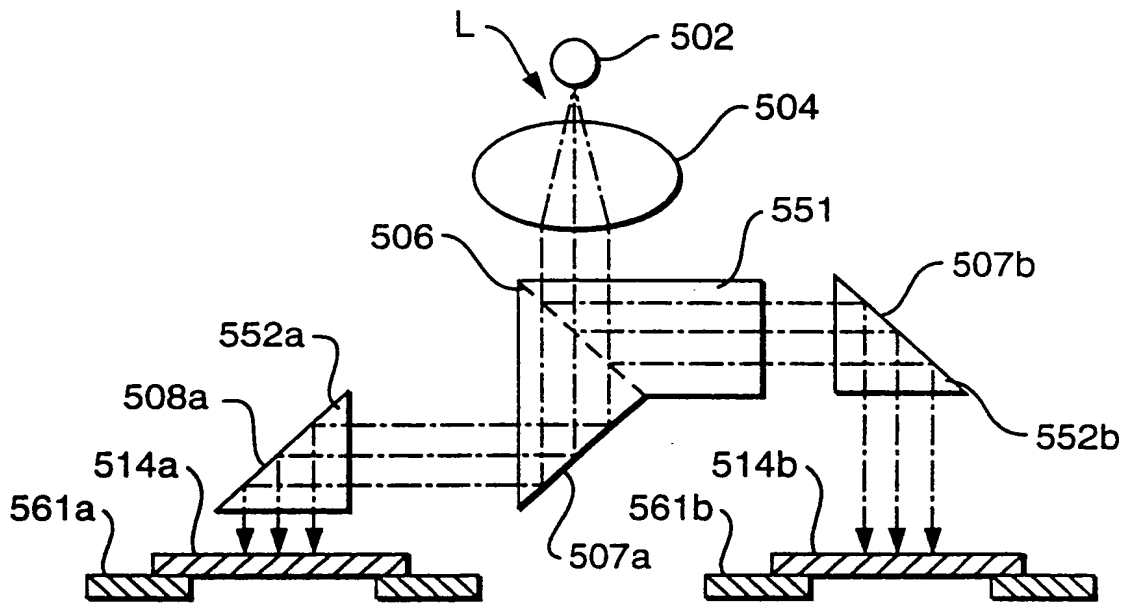
**FIG. 4**

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

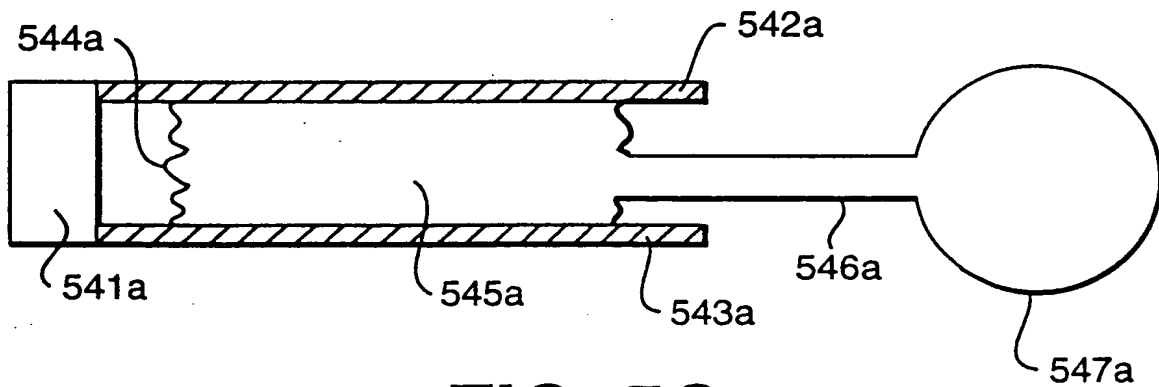


**FIG. 5A**

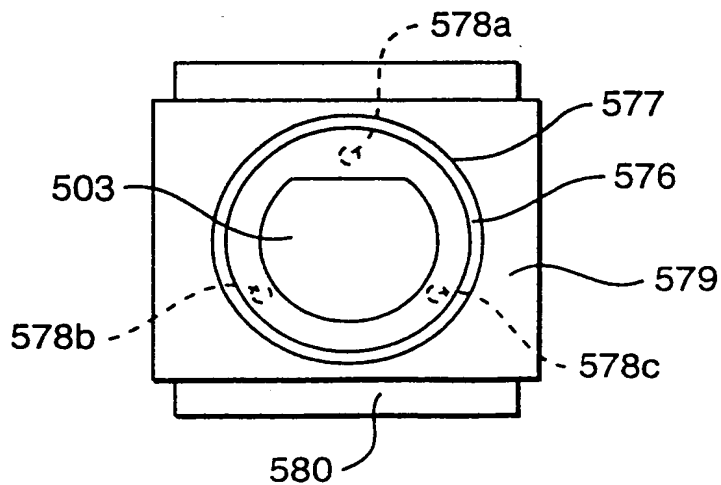
APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		



**FIG. 5B**



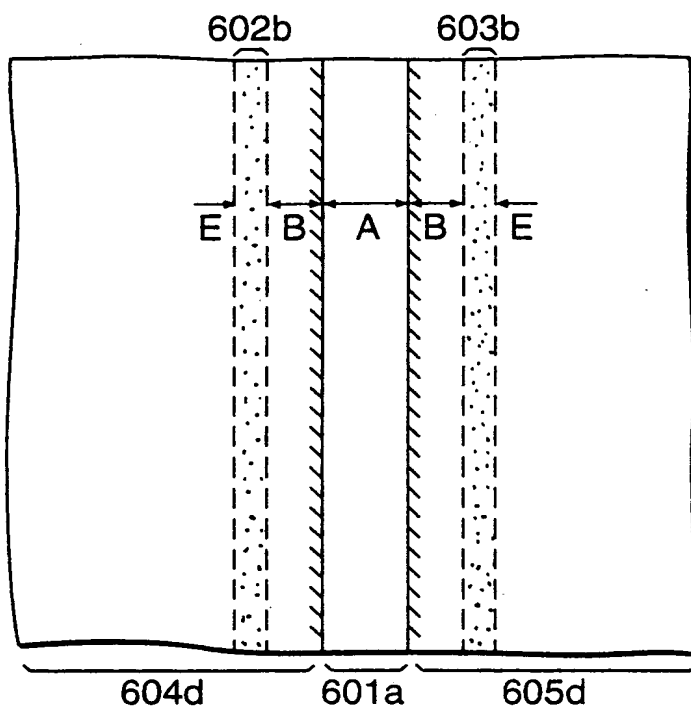
**FIG. 5C**



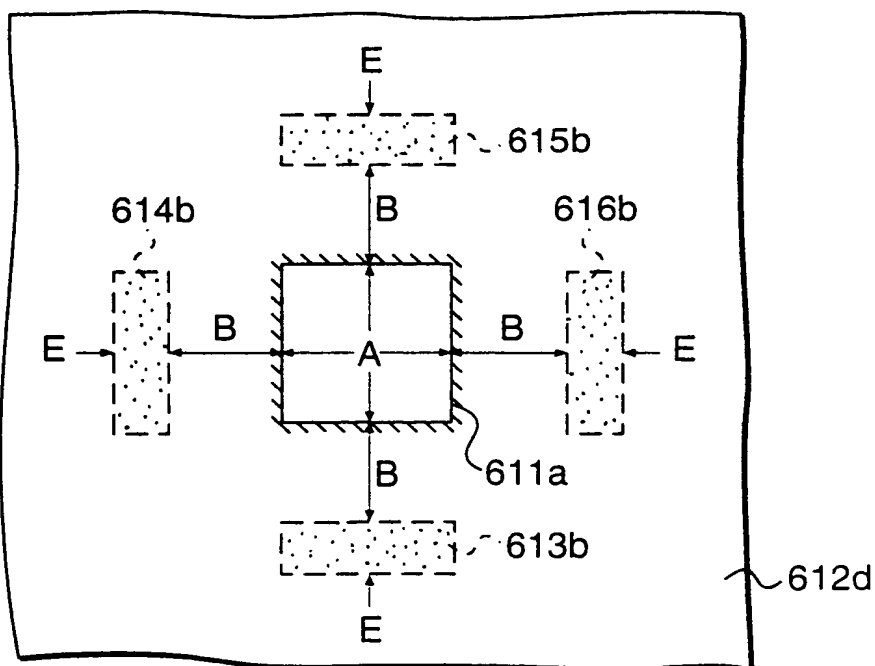
**FIG. 5D**

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
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**FIG. 6A**

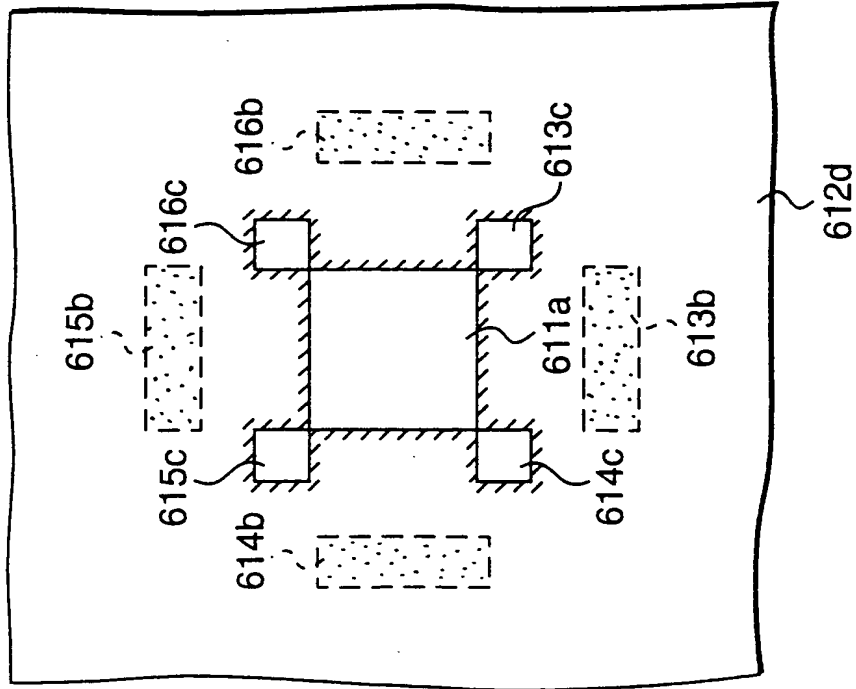


**FIG. 6B**

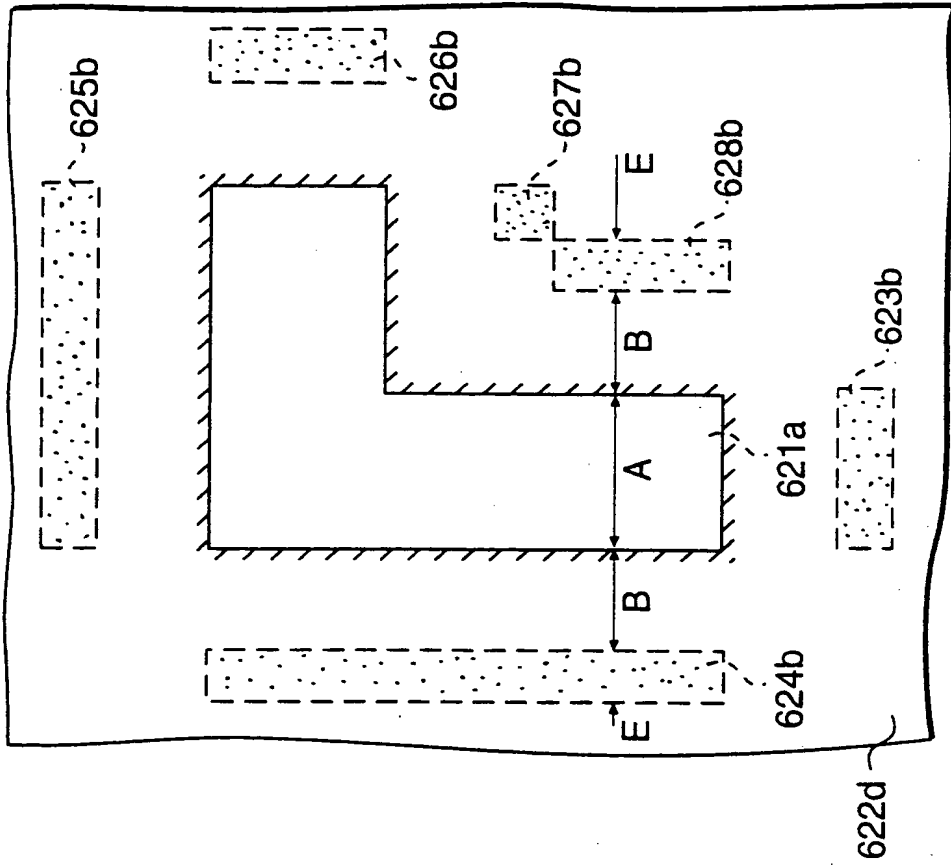


APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

**FIG. 6C**

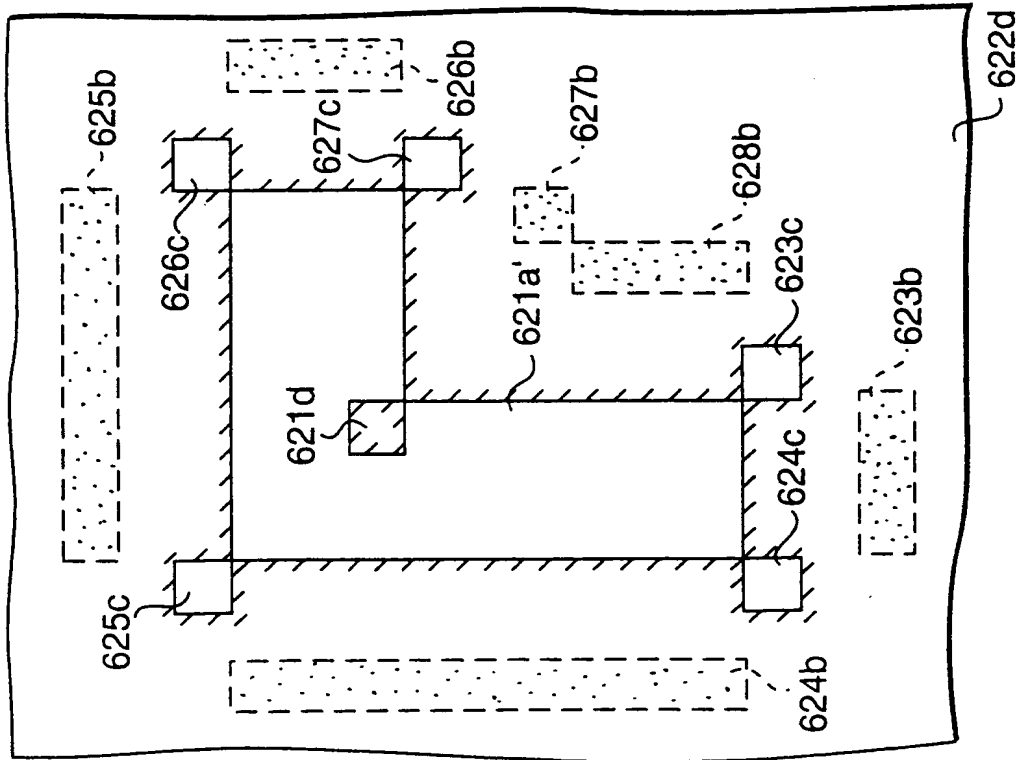


**FIG. 6D**

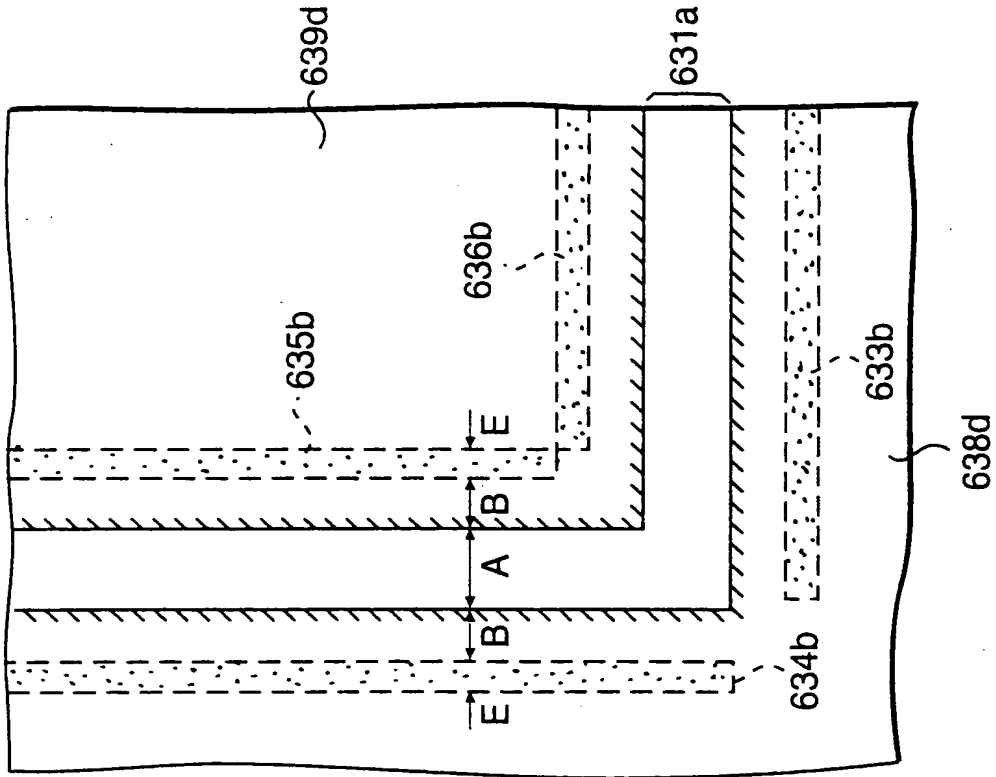


APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

**FIG. 6E**

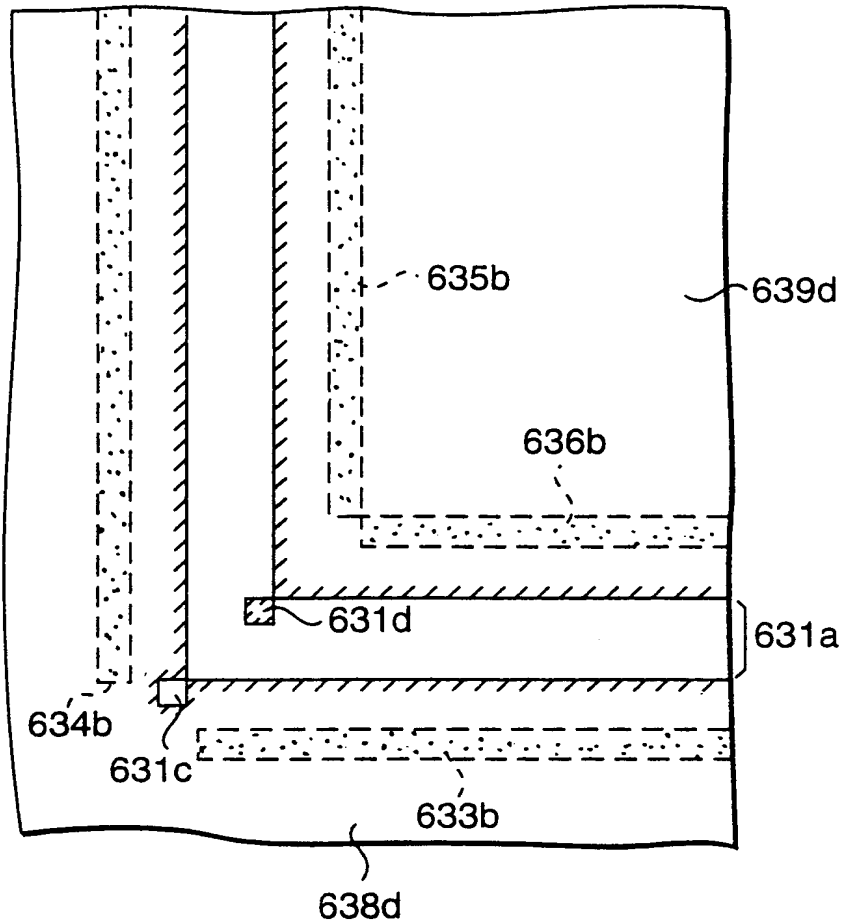


**FIG. 6F**

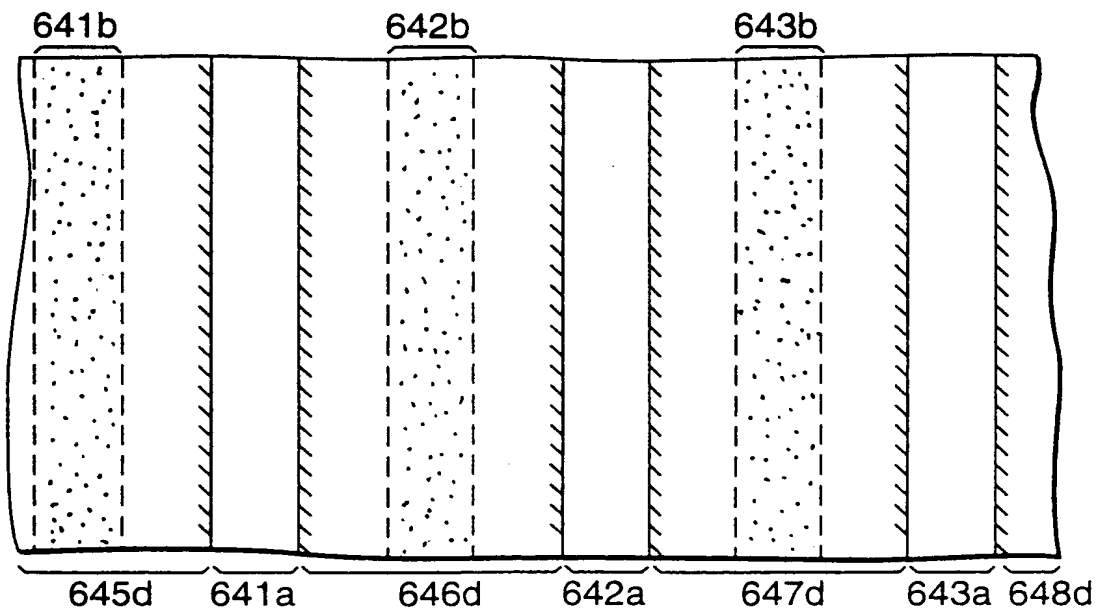


APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

**FIG. 6G**

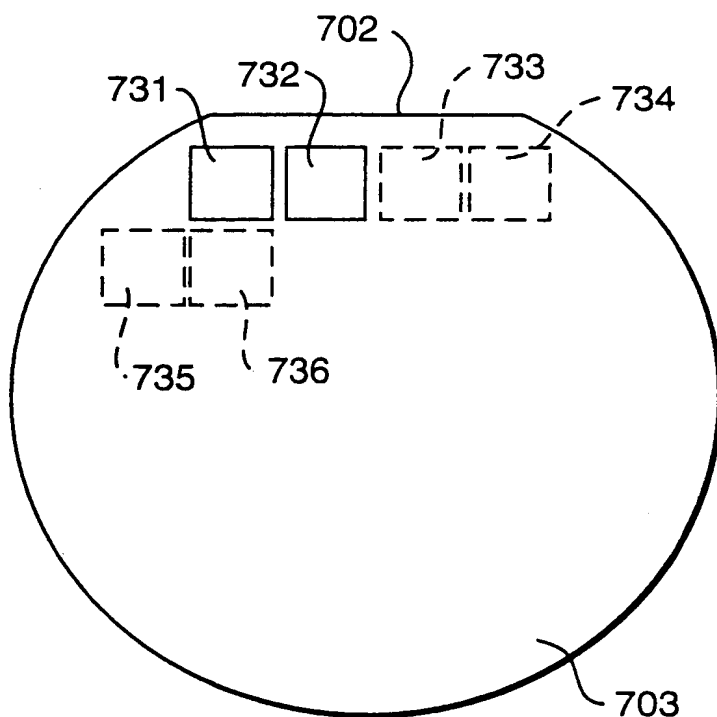


**FIG. 6H**

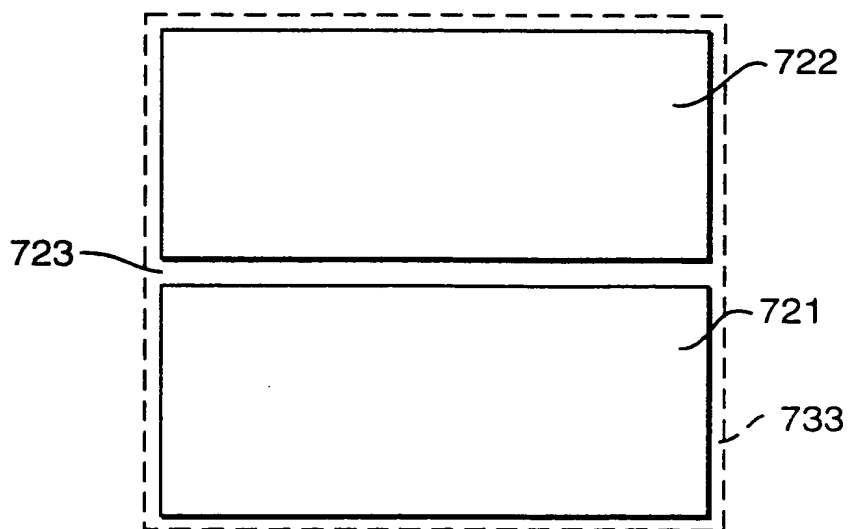




APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

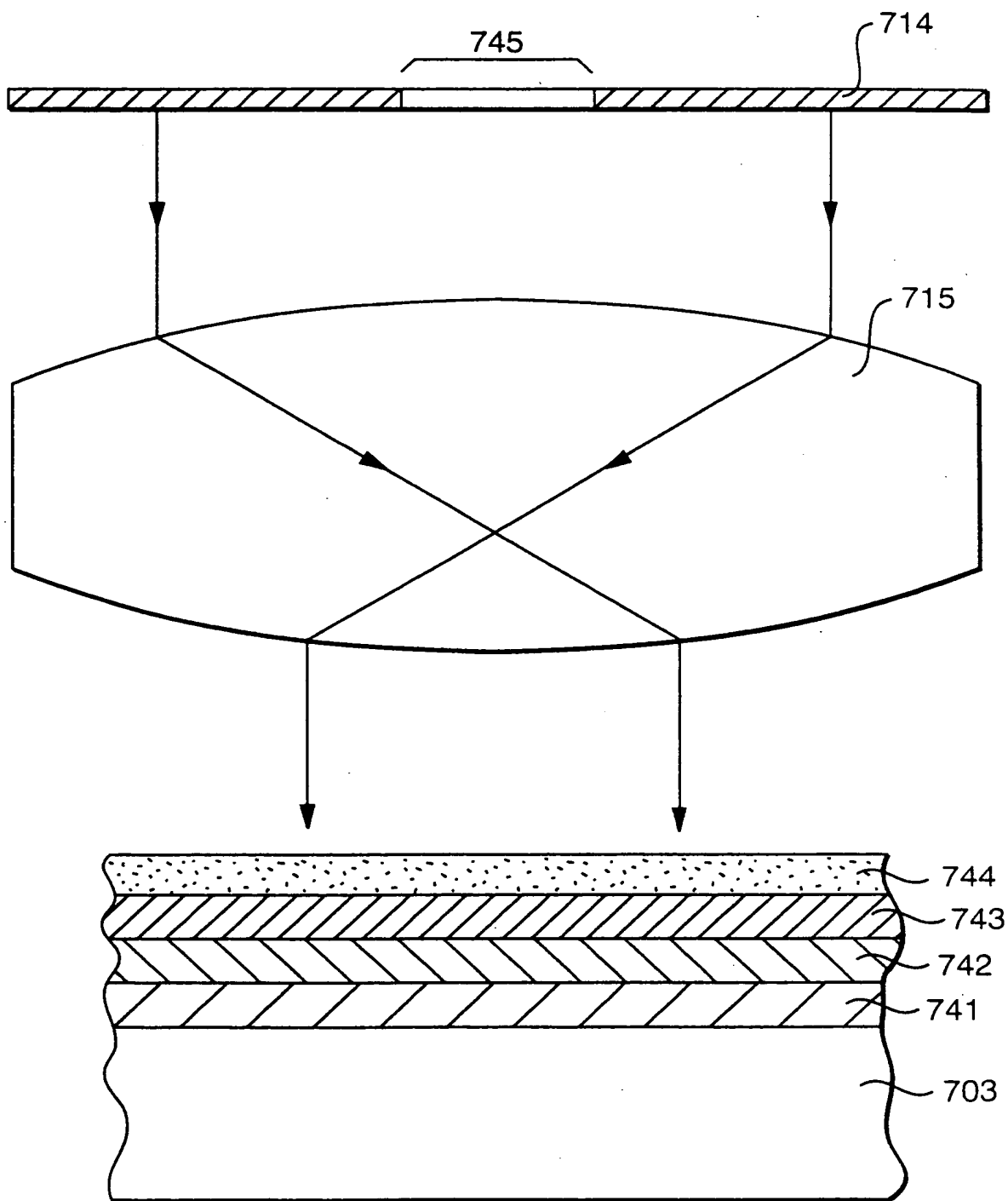


**FIG. 7A**



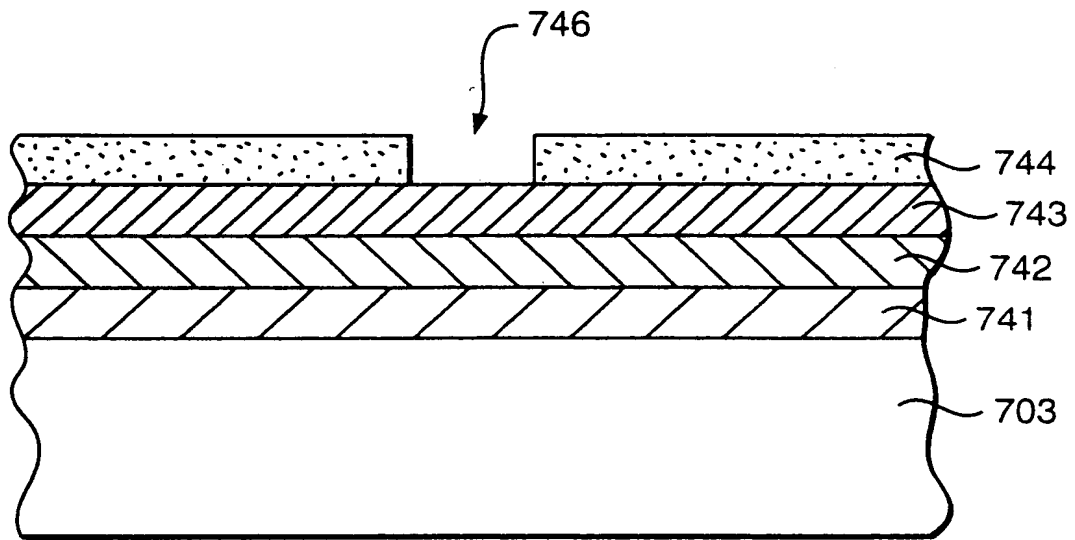
**FIG. 7B**

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

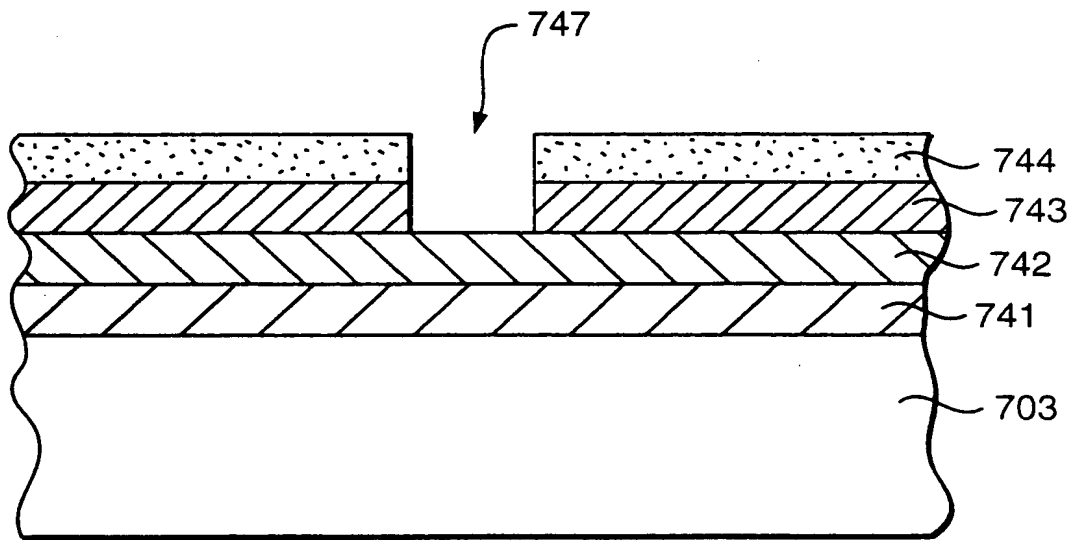


**FIG. 7C**

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

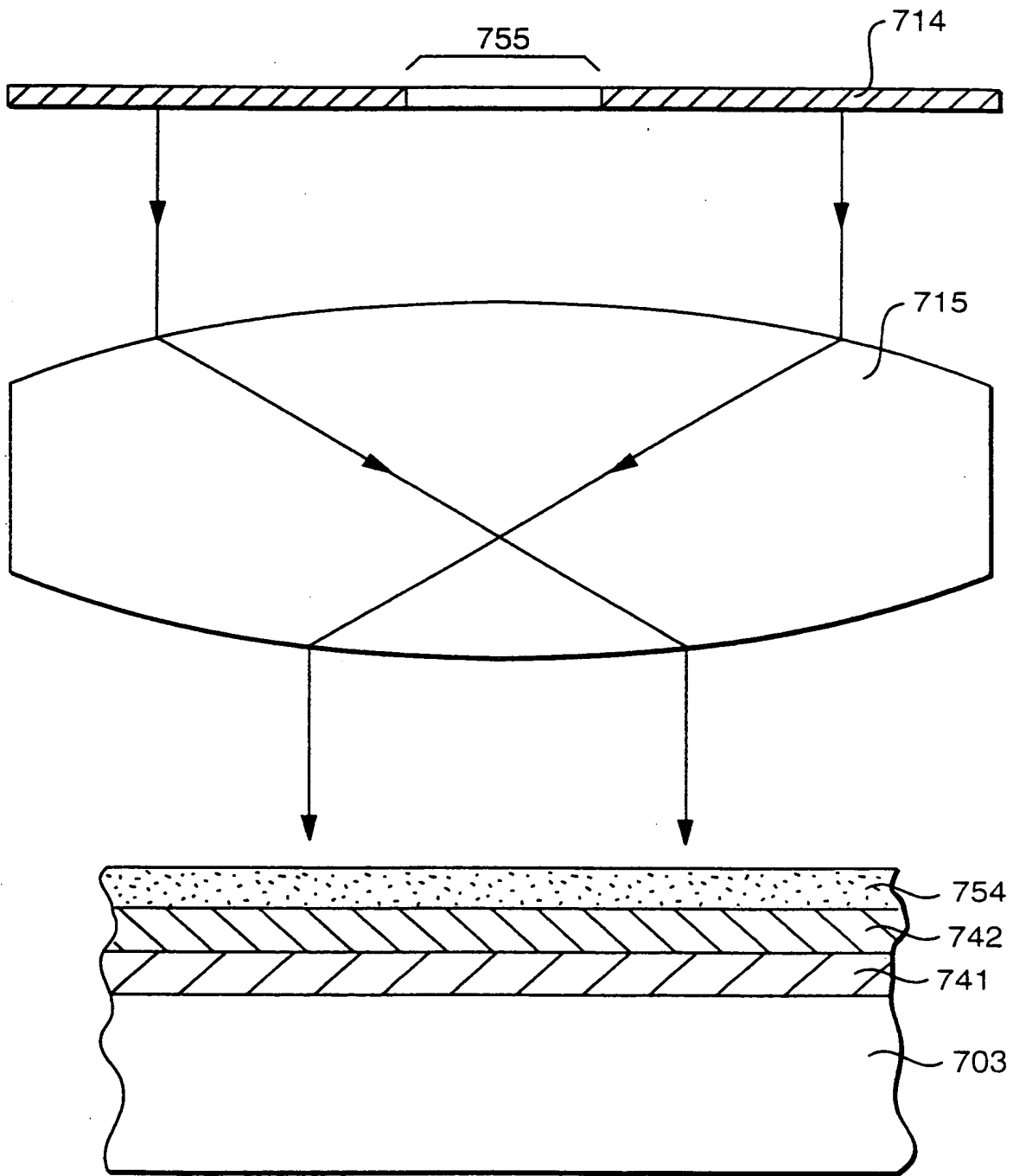


**FIG. 7D**



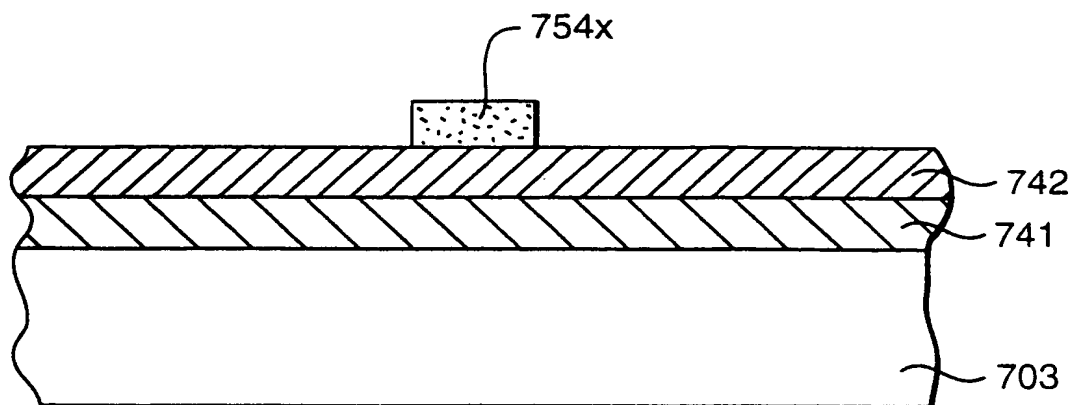
**FIG. 7E**

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

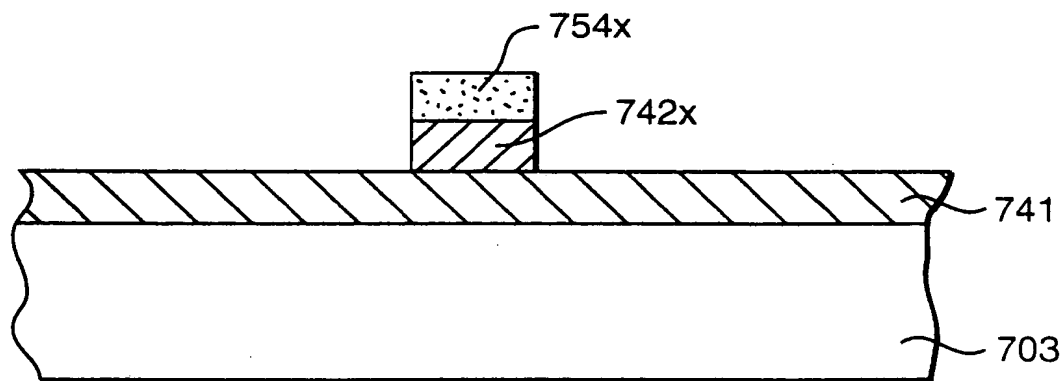


**FIG. 7F**

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

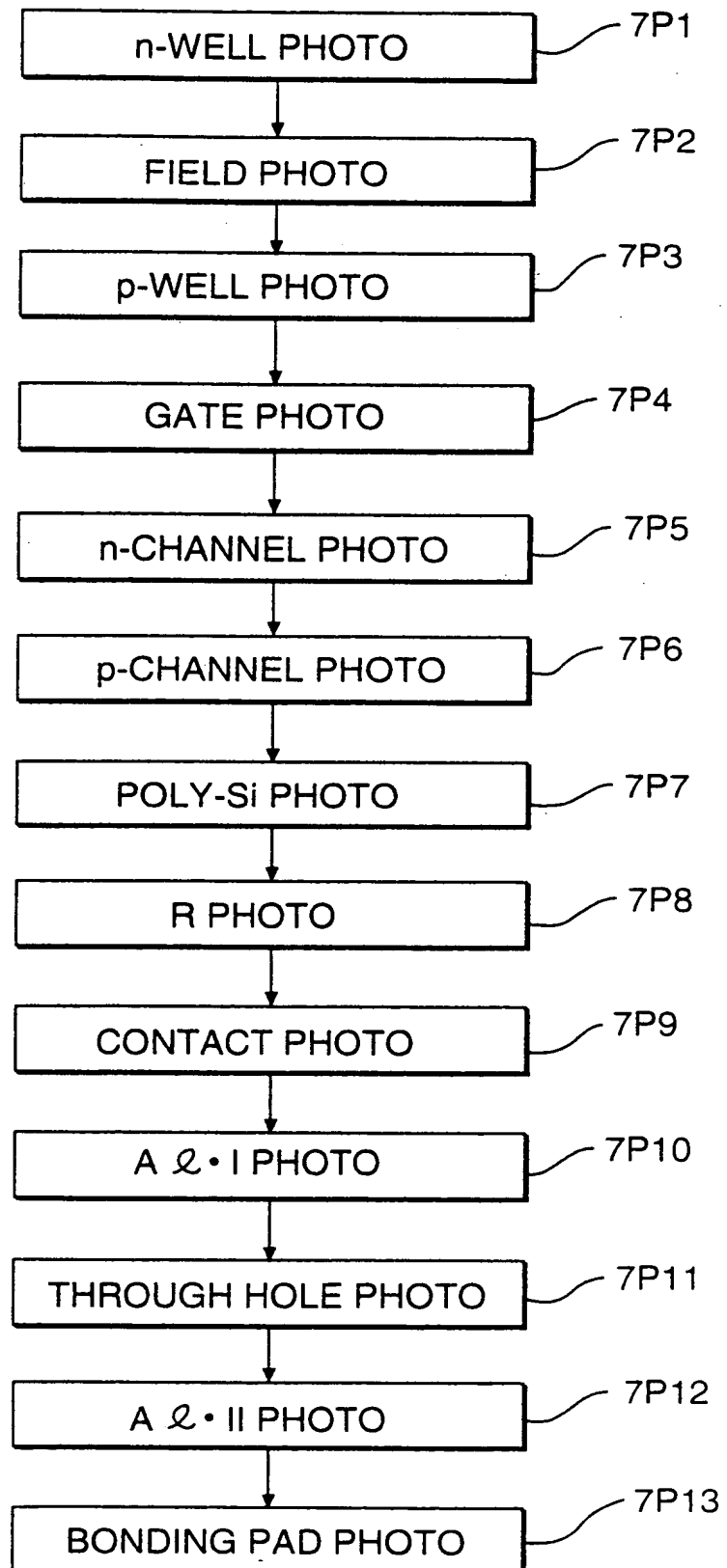


**FIG. 7G**



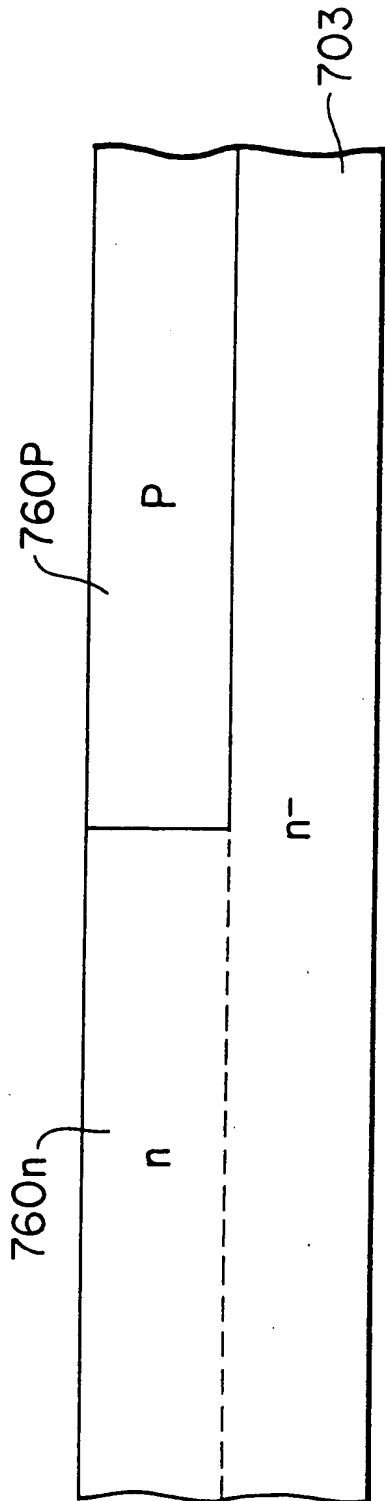
**FIG. 7H**

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

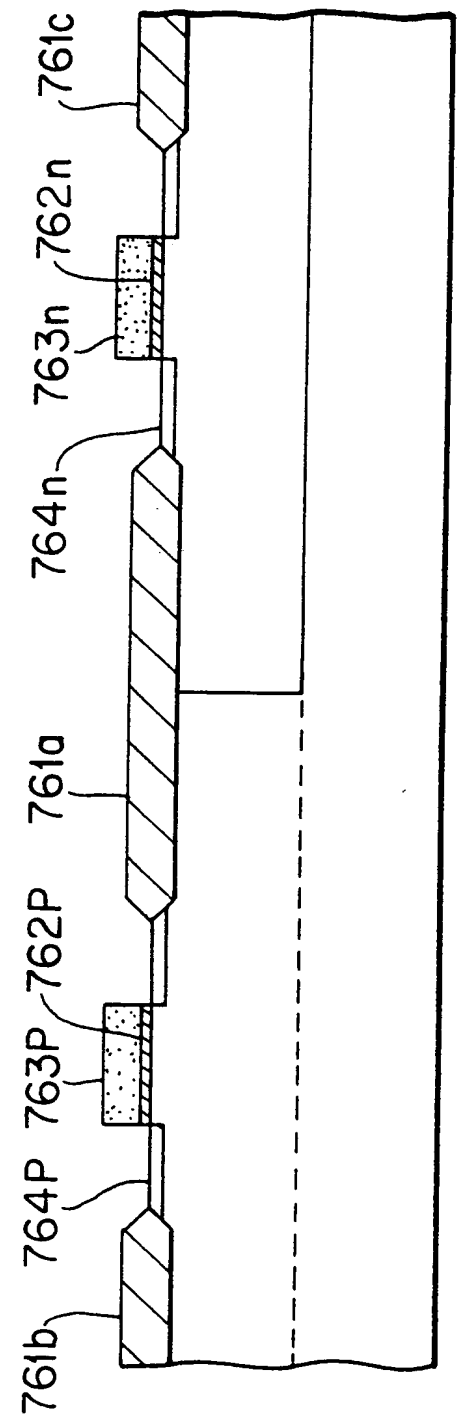


**FIG. 7I**

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

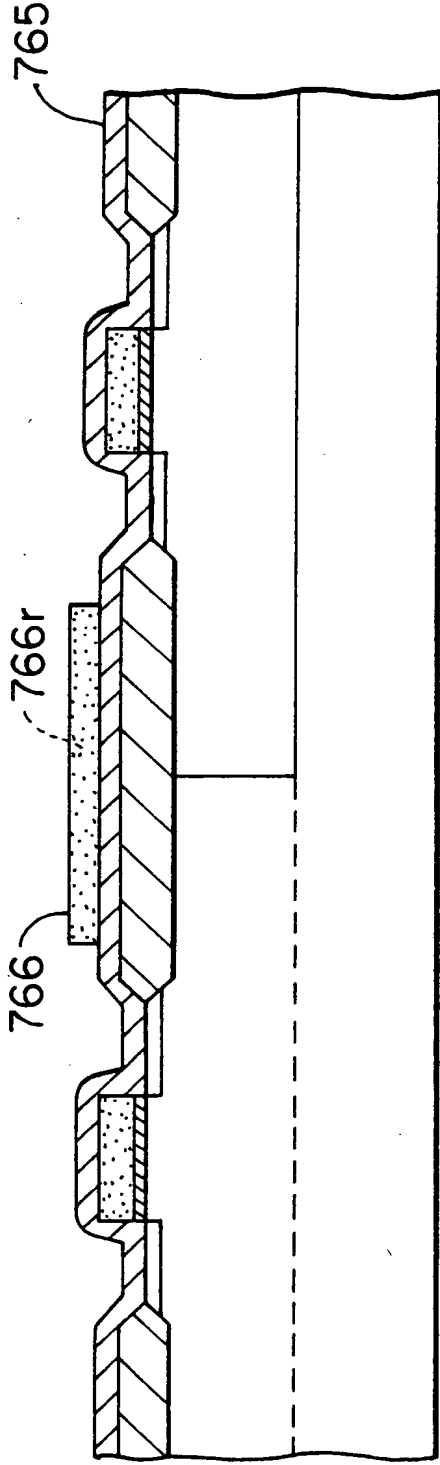


**FIG. 7J**

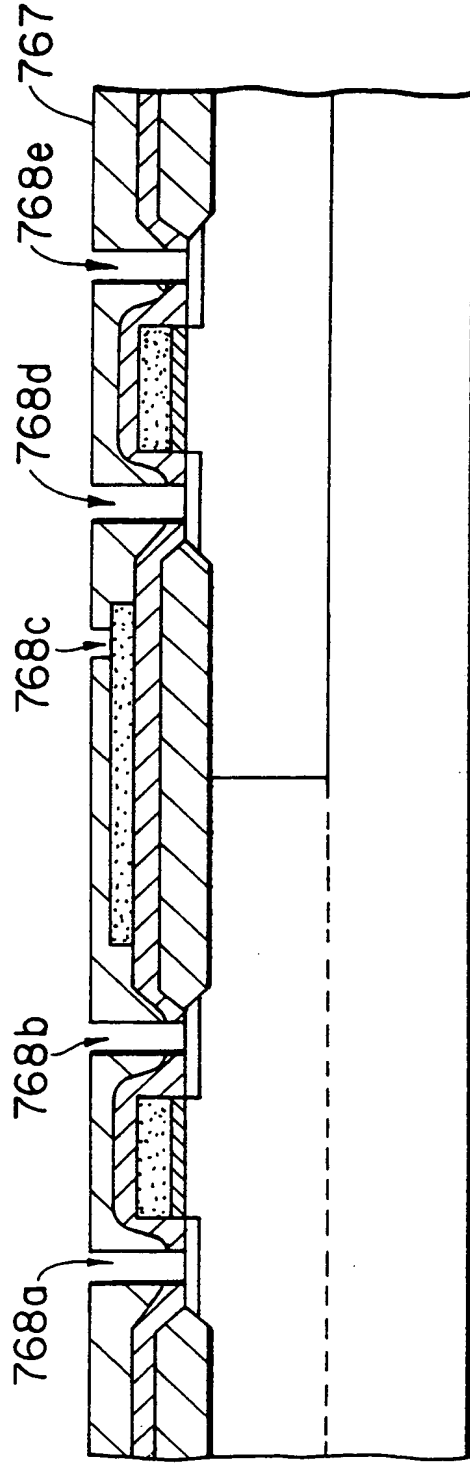


**FIG. 7K**

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		



**FIG. 7L**



**FIG. 7M**



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

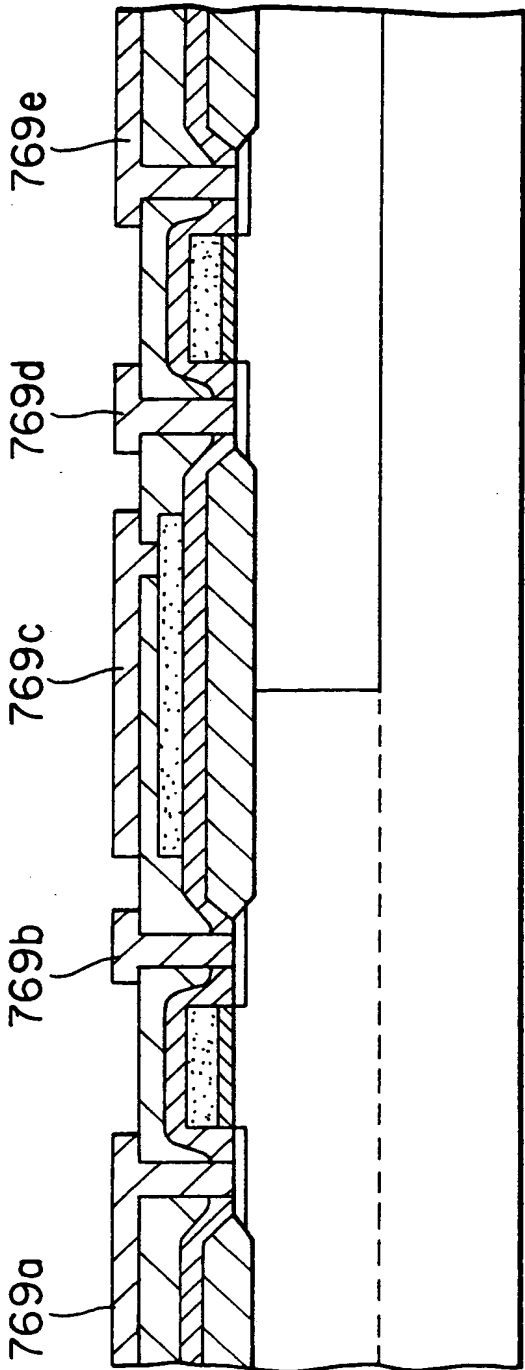


FIG. 7N

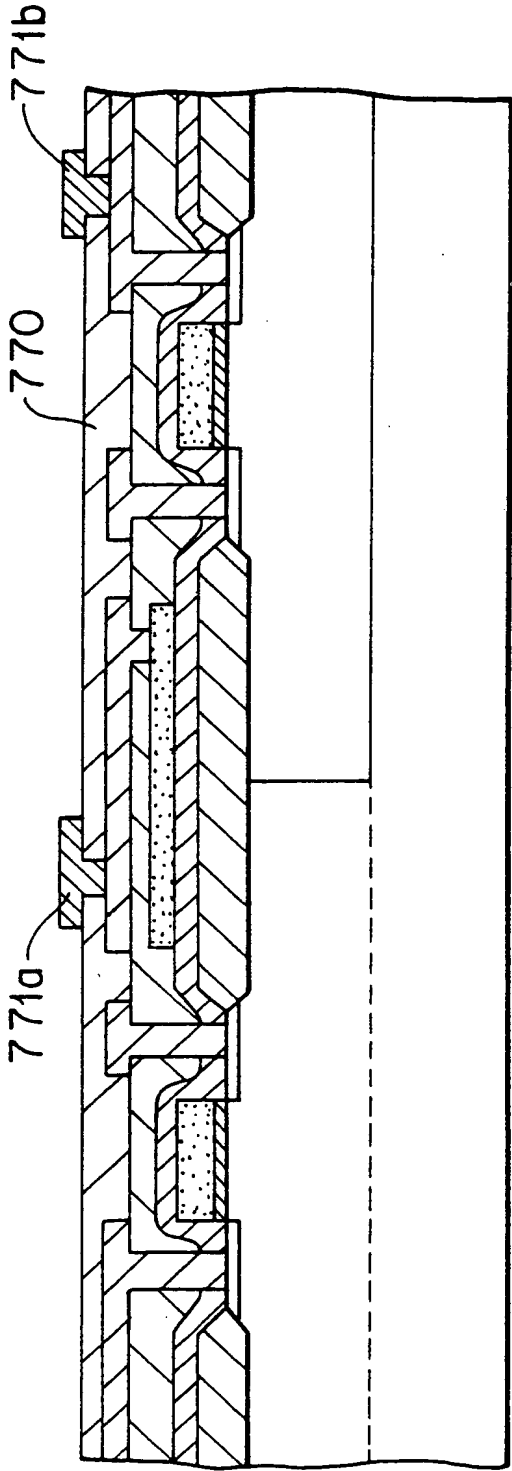


FIG. 7O

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

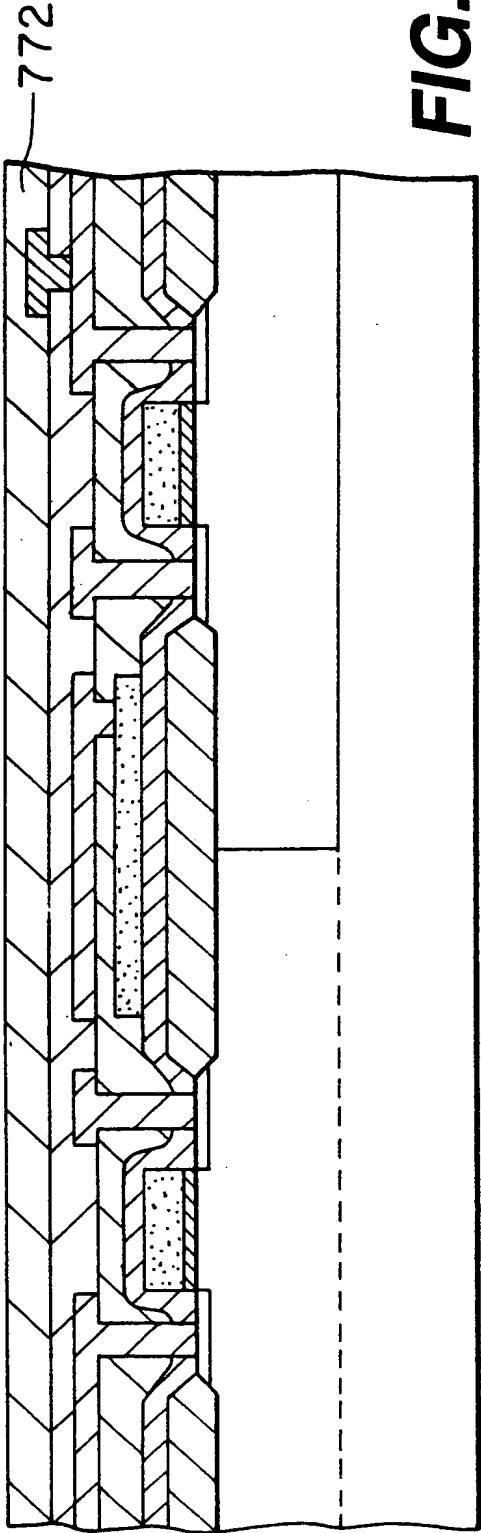


FIG. 7P

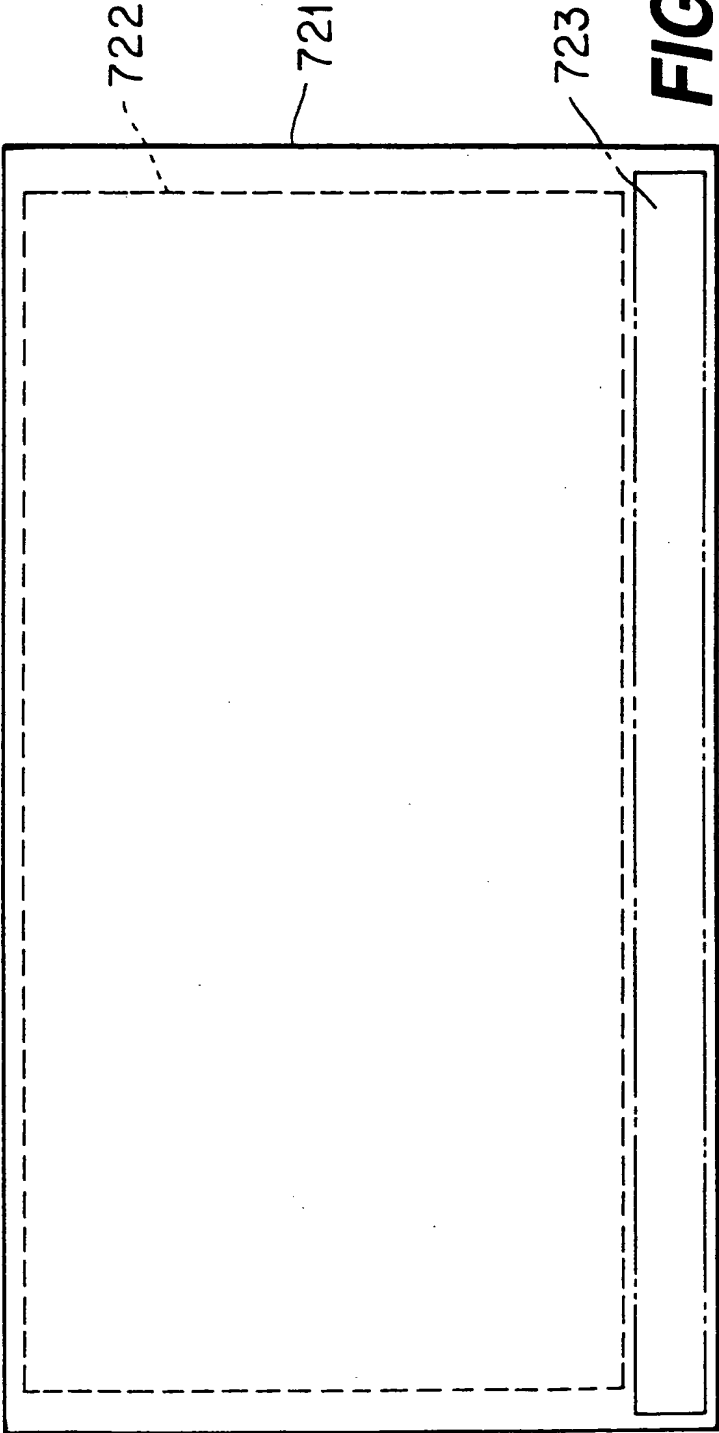
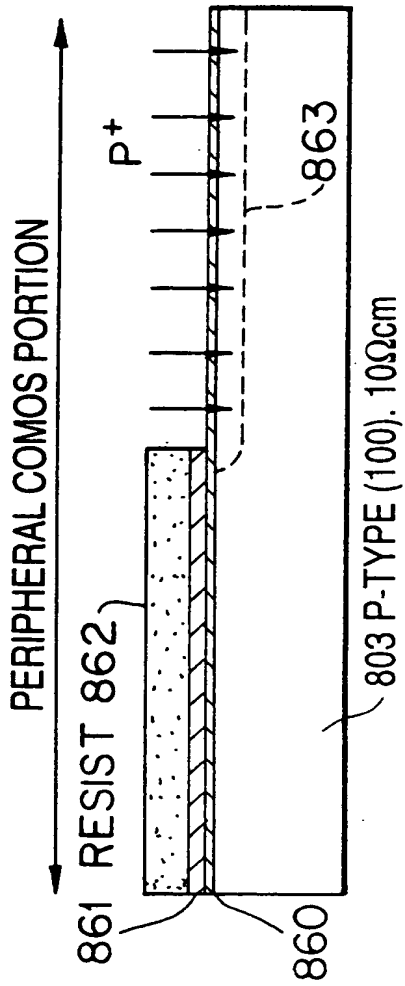
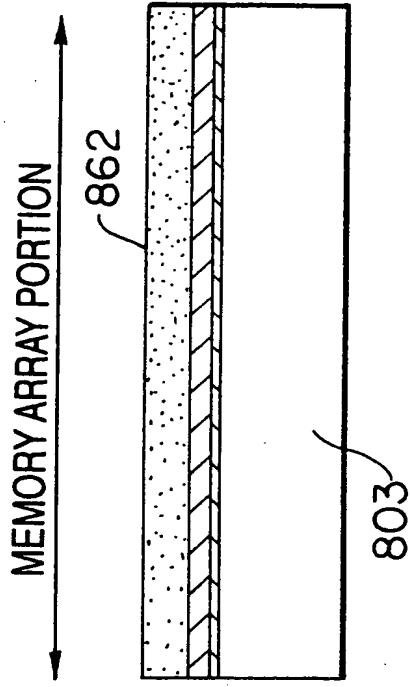


FIG. 7Q

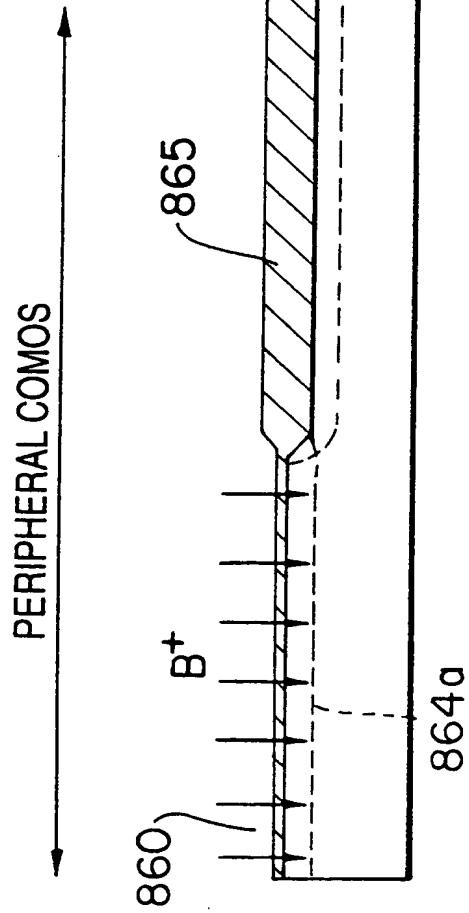
APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		



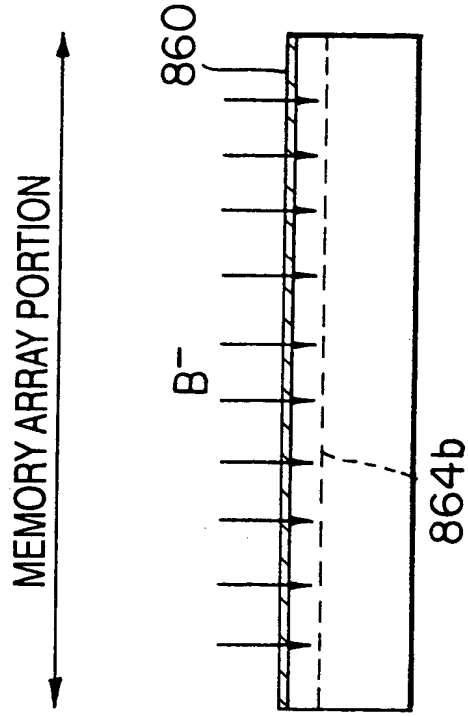
**FIG. 8A-1**



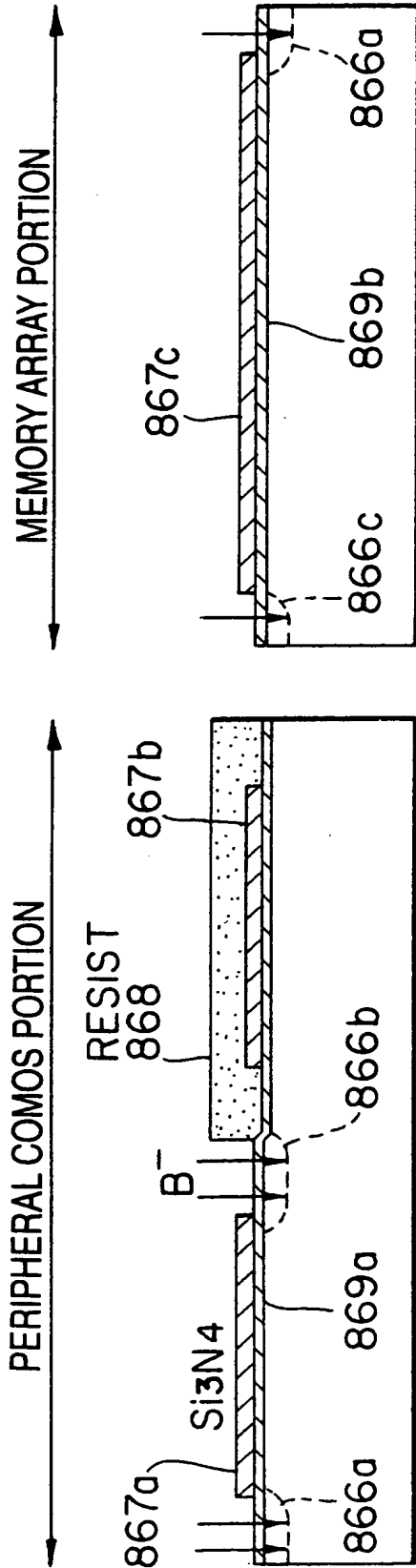
**FIG. 8A-2**



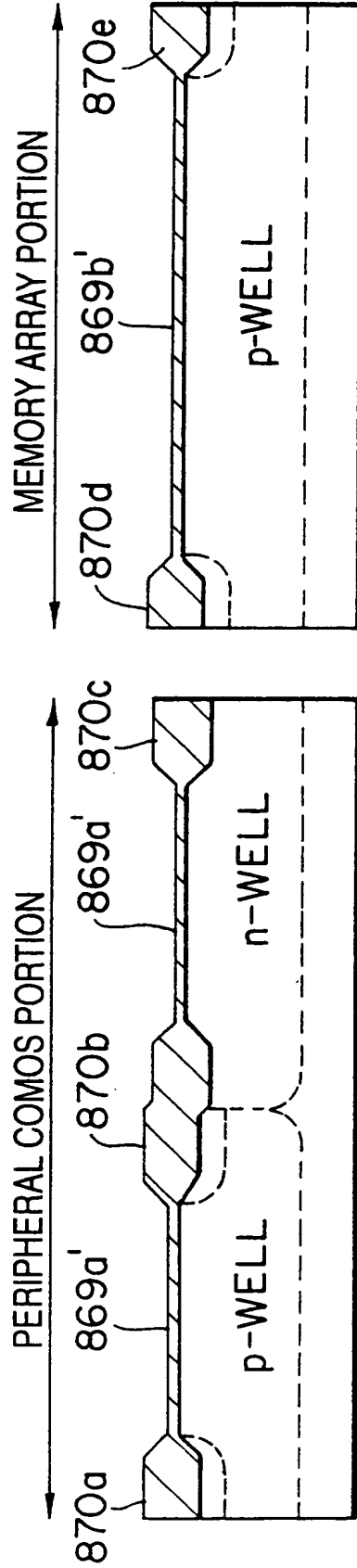
**FIG. 8B-1**



**FIG. 8B-2**



**FIG. 8C-2**

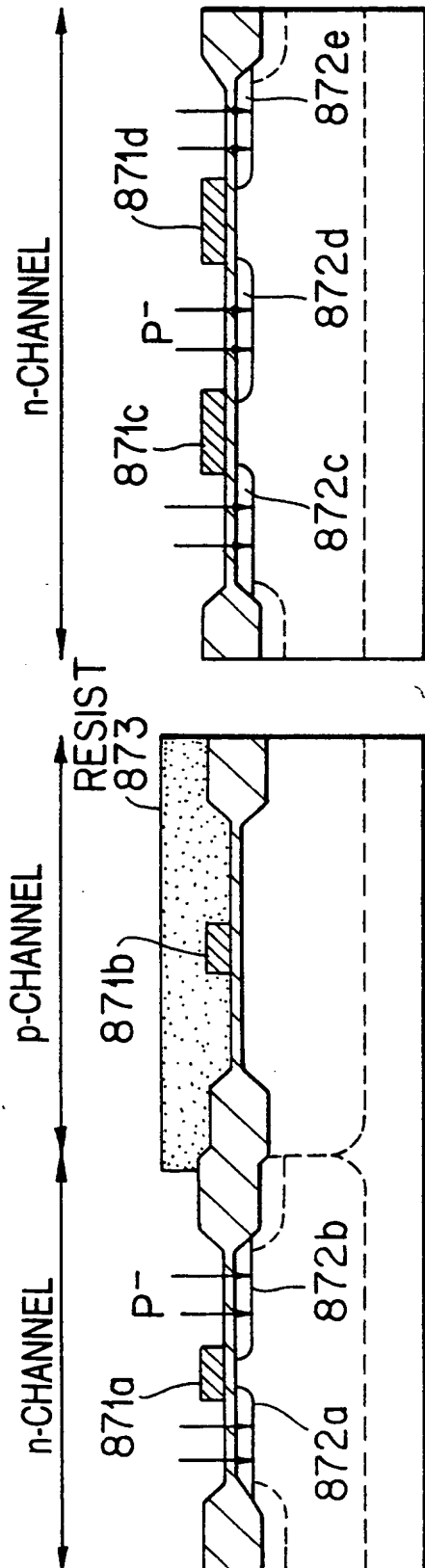


**FIG. 8D-2**

**FIG. 8C-1**

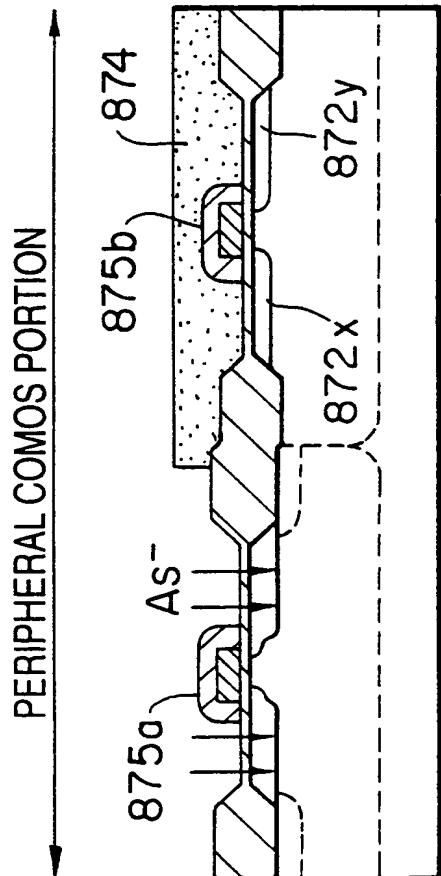
**FIG. 8D-1**

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

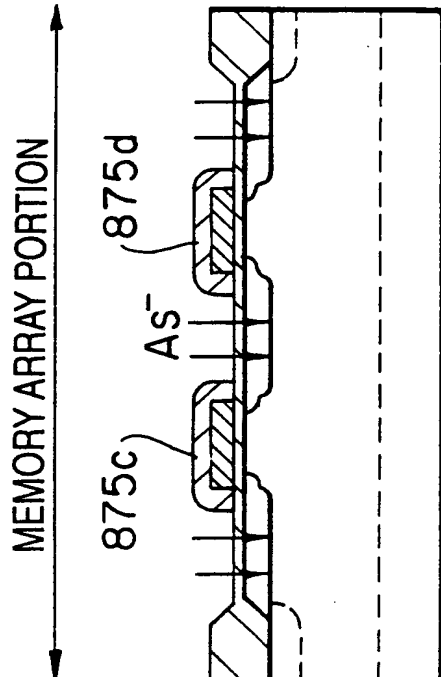


**FIG. 8E-1**

**FIG. 8E-2**

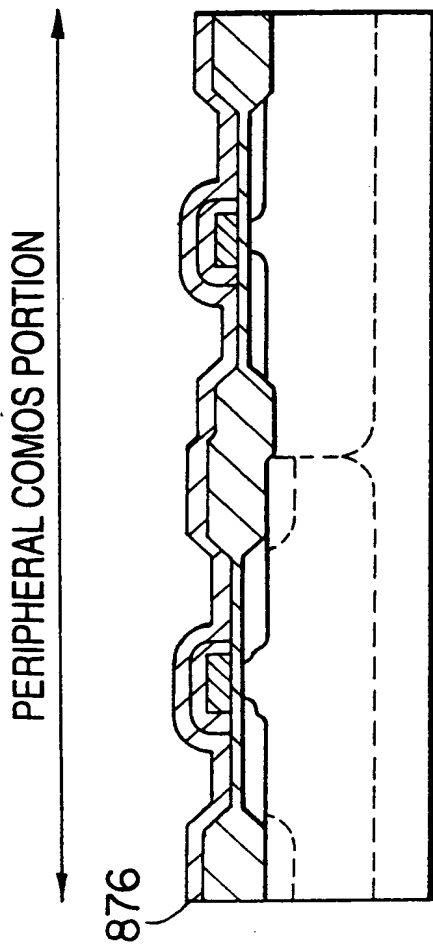


**FIG. 8F-1**

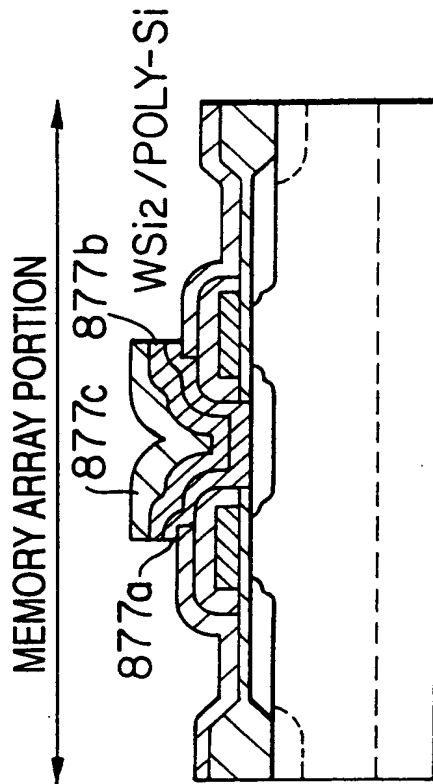


**FIG. 8F-2**

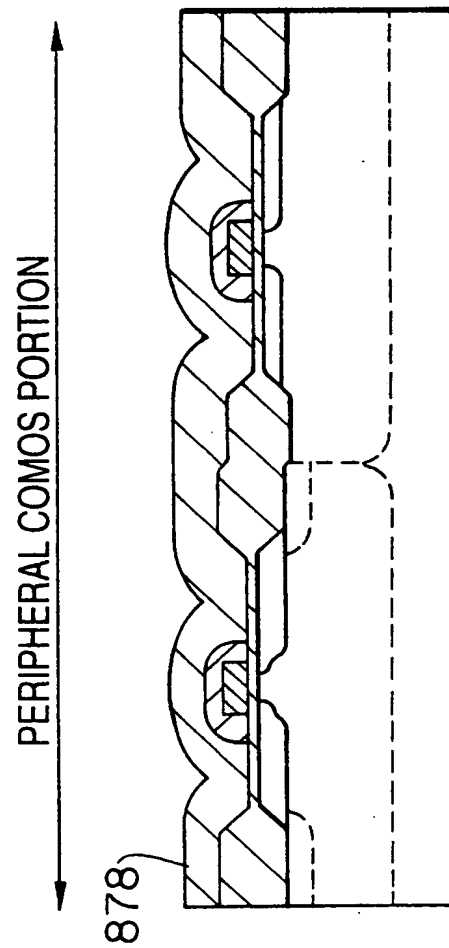
APPROVED	O.G. FIG.		
BY	CLASS	SUBCLASS	
DRAFTSMAN			



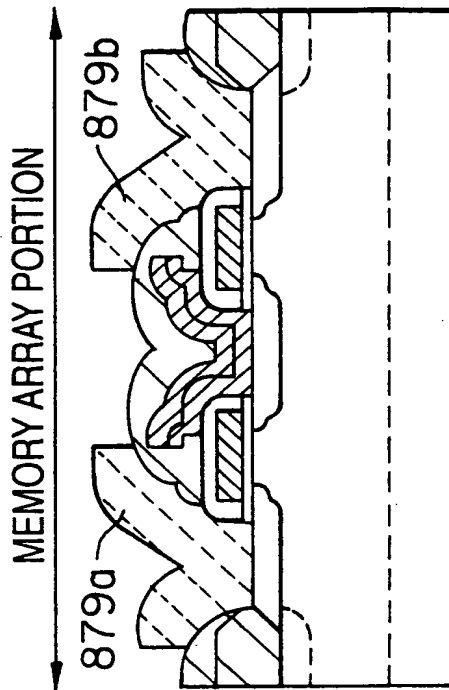
**FIG. 8G-1**



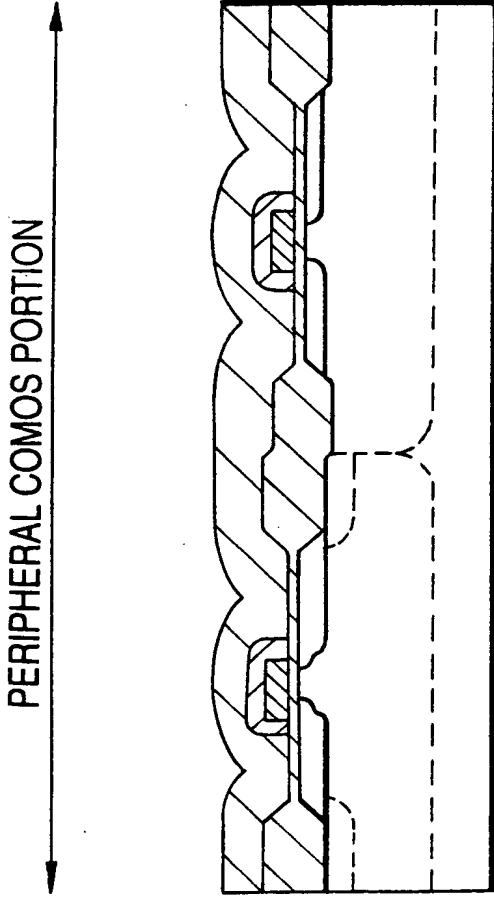
**FIG. 8G-2**



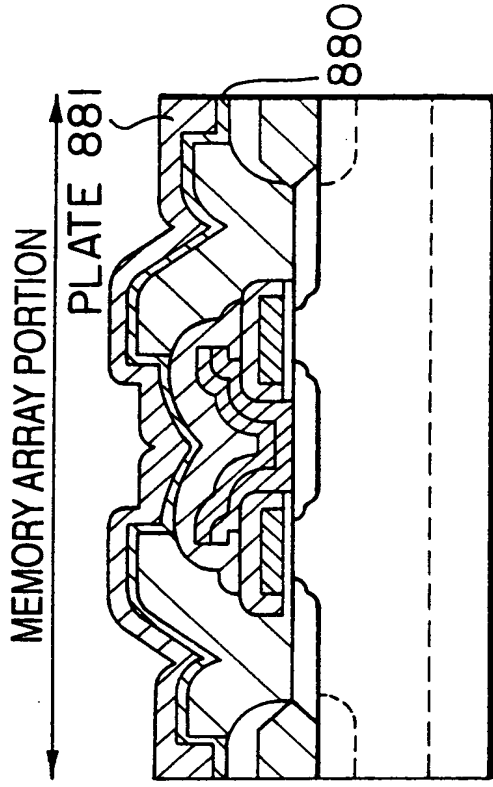
**FIG. 8H-1**



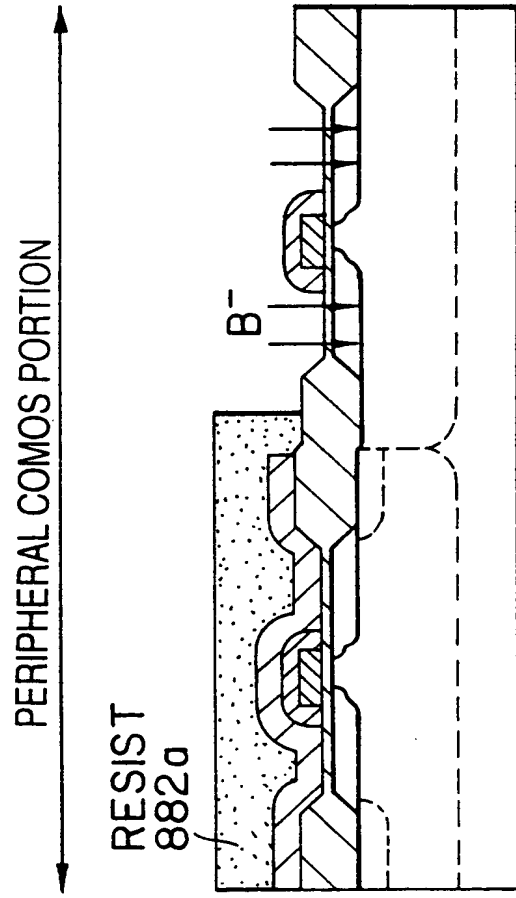
**FIG. 8H-2**



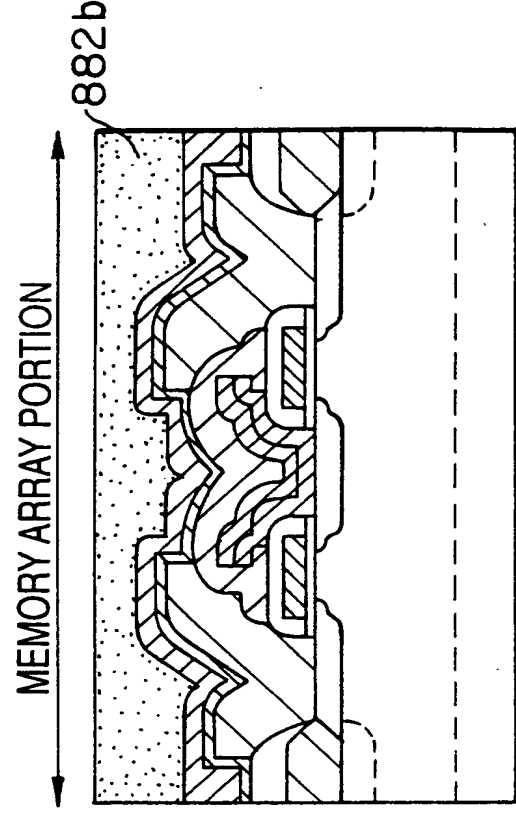
**FIG. 8I-1**



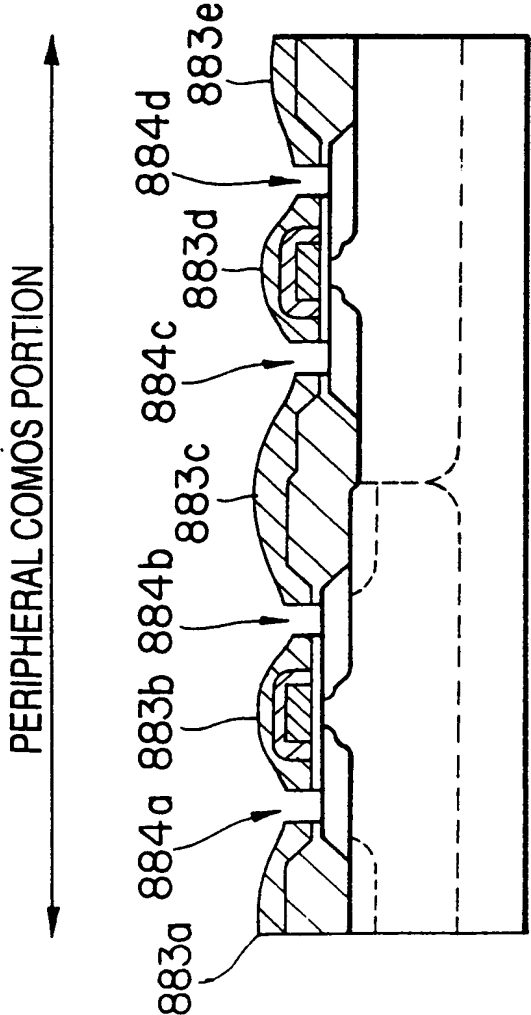
**FIG. 8I-2**



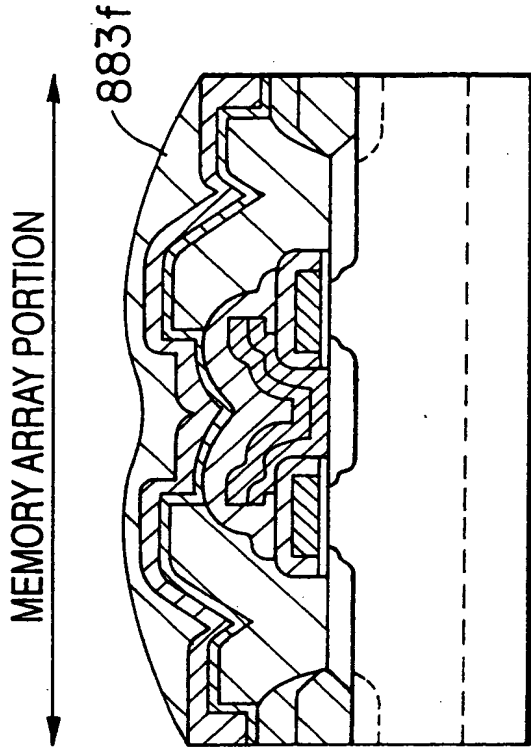
**FIG. 8J-1**



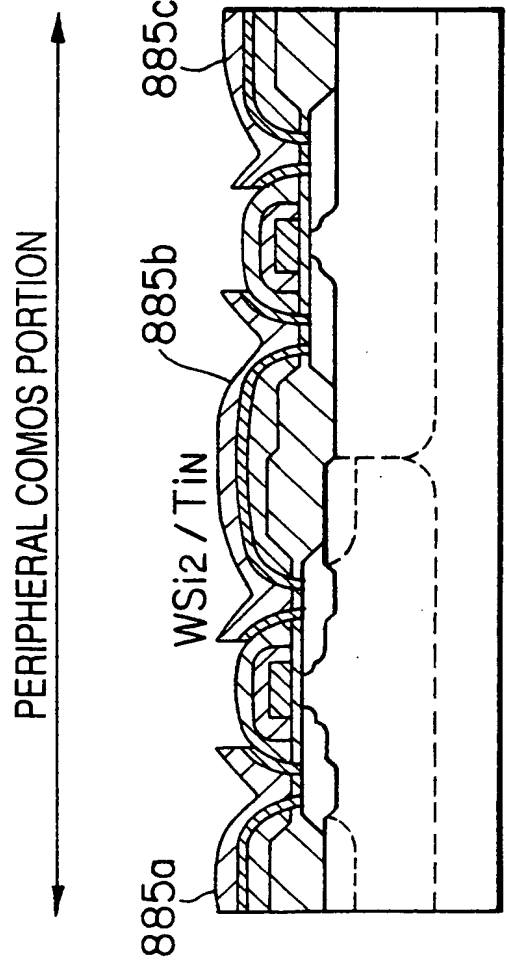
**FIG. 8J-2**



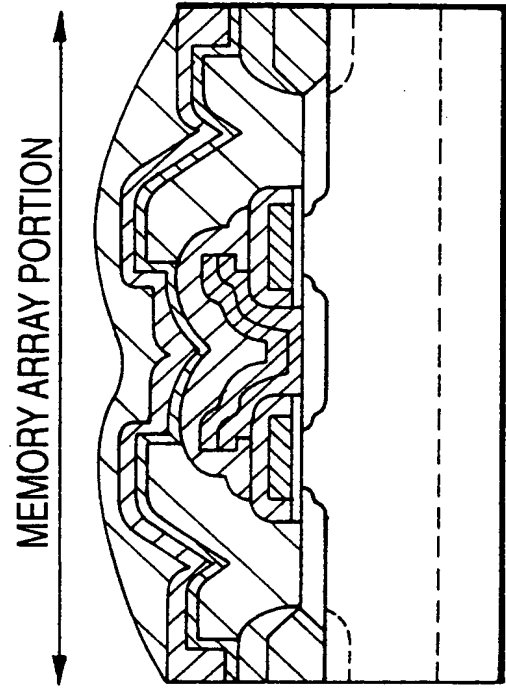
**FIG. 8K-1**



**FIG. 8K-2**

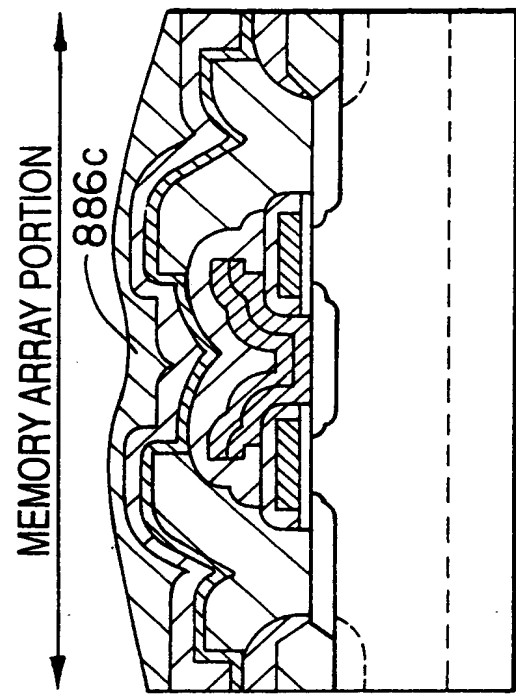


**FIG. 8L-1**

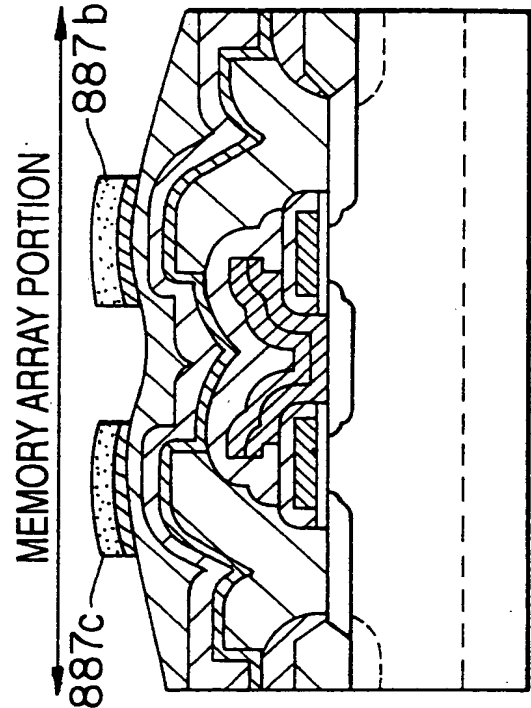


**FIG. 8L-2**

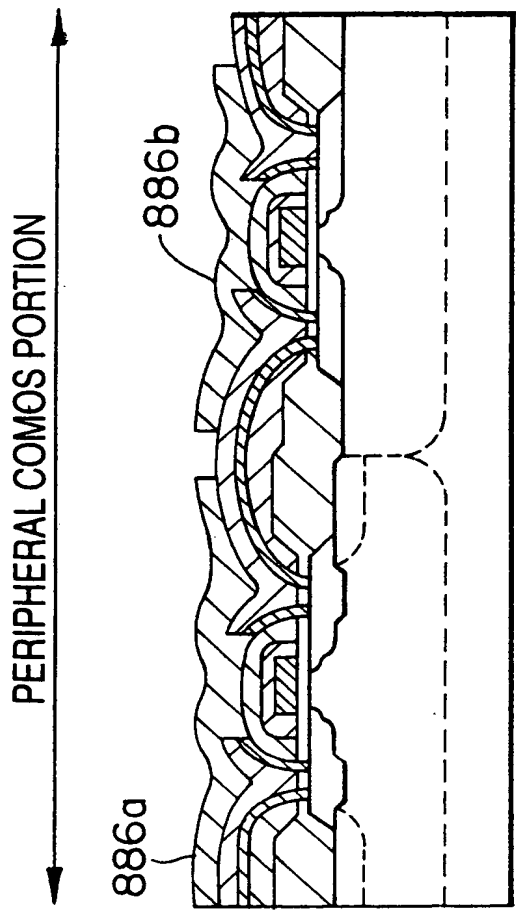




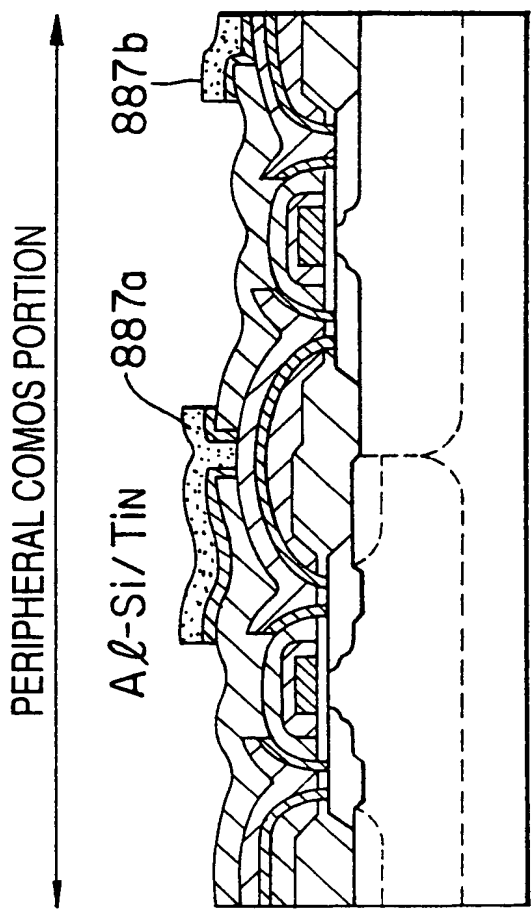
**FIG. 8M-2**



**FIG. 8N-2**

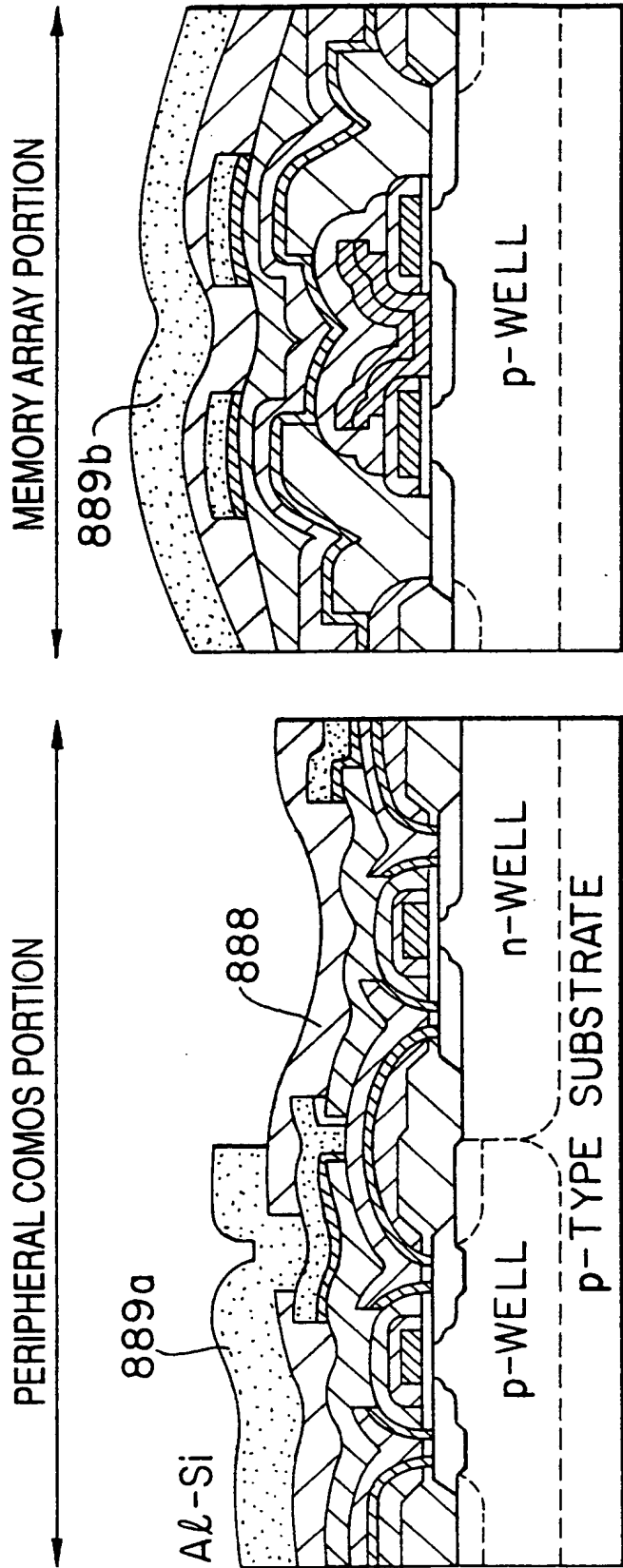


**FIG. 8M-1**



**FIG. 8N-1**

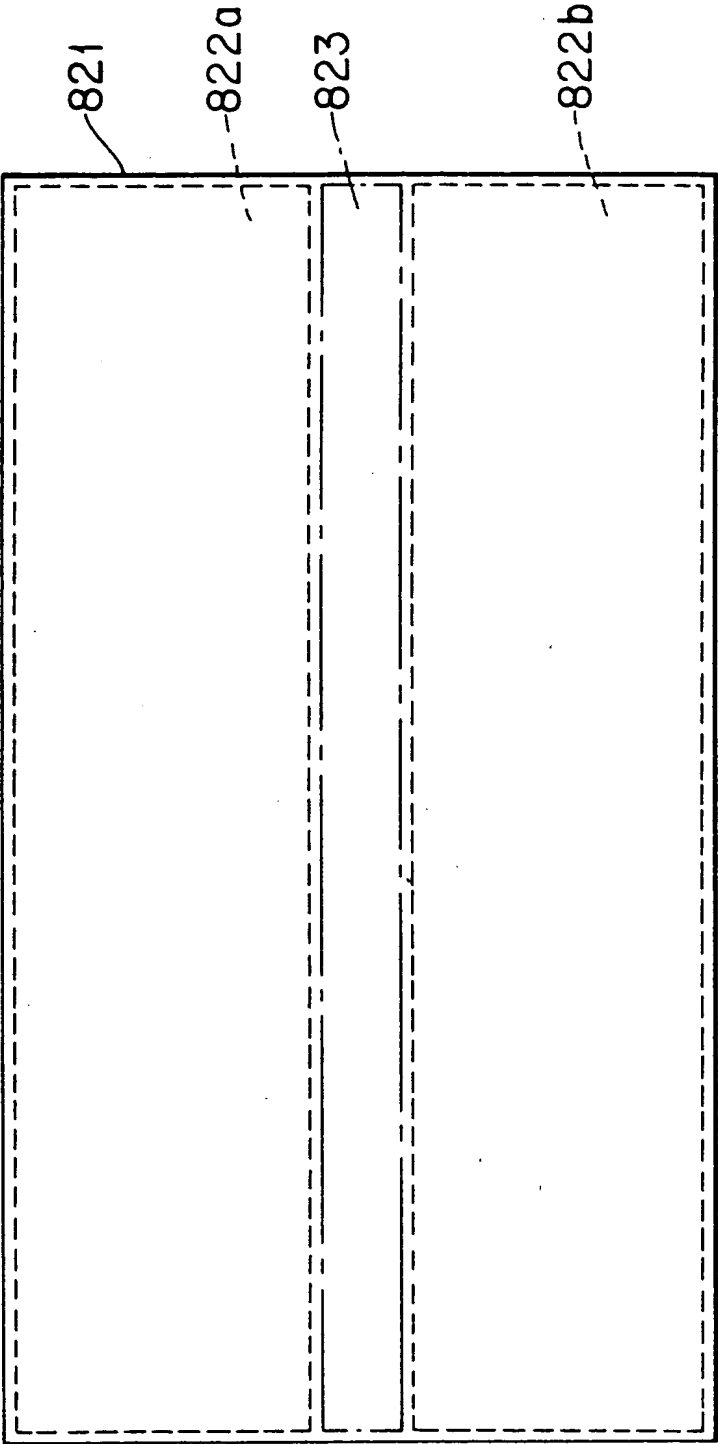
APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
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**FIG. 80-1**

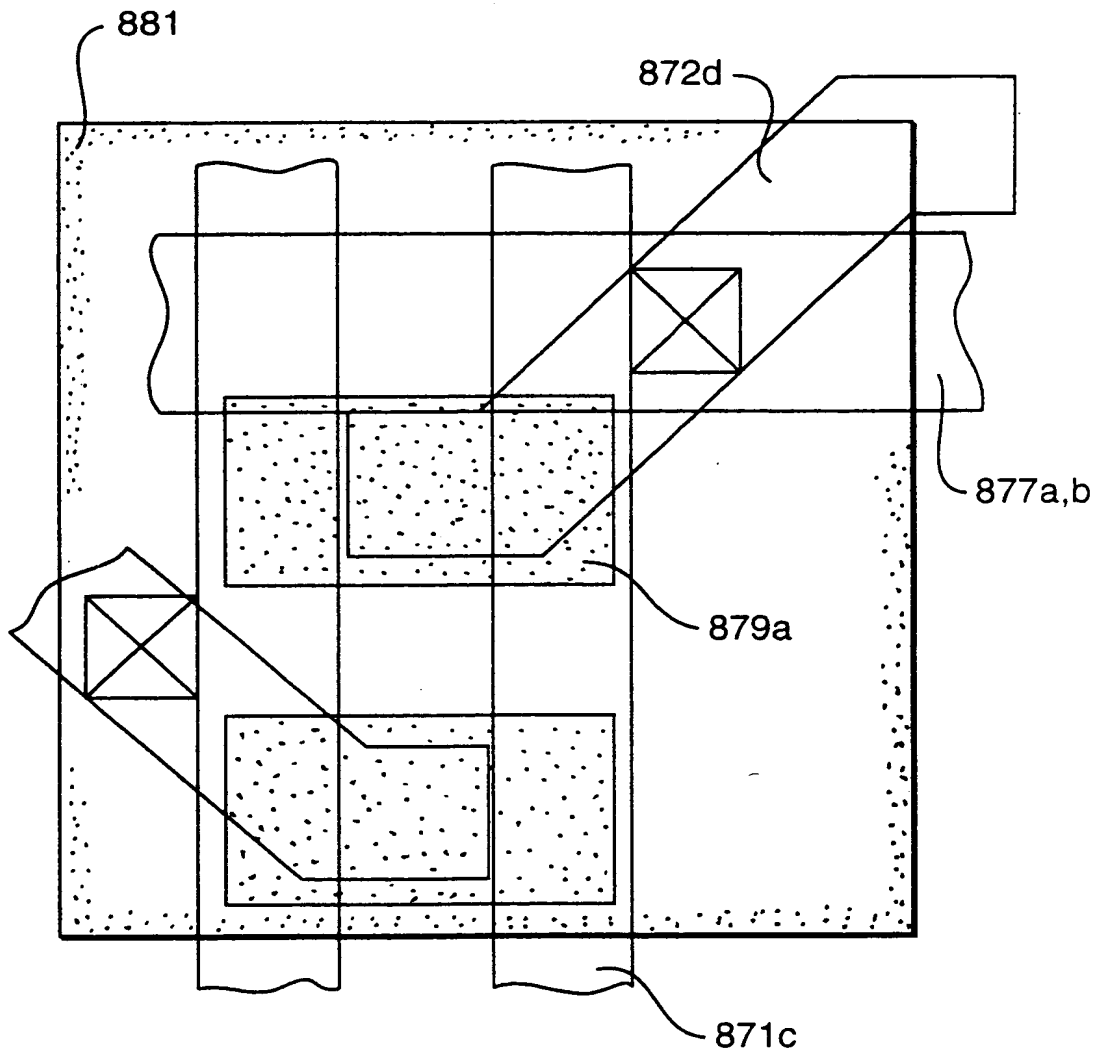
**FIG. 80-2**

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		



**FIG. 8P**

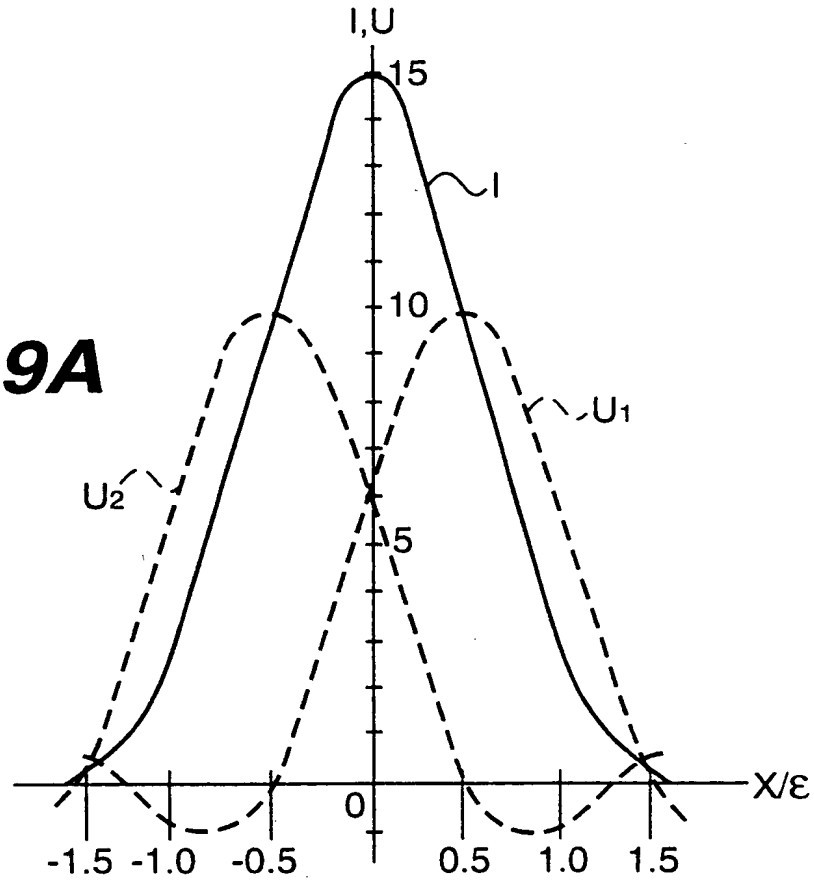
APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		



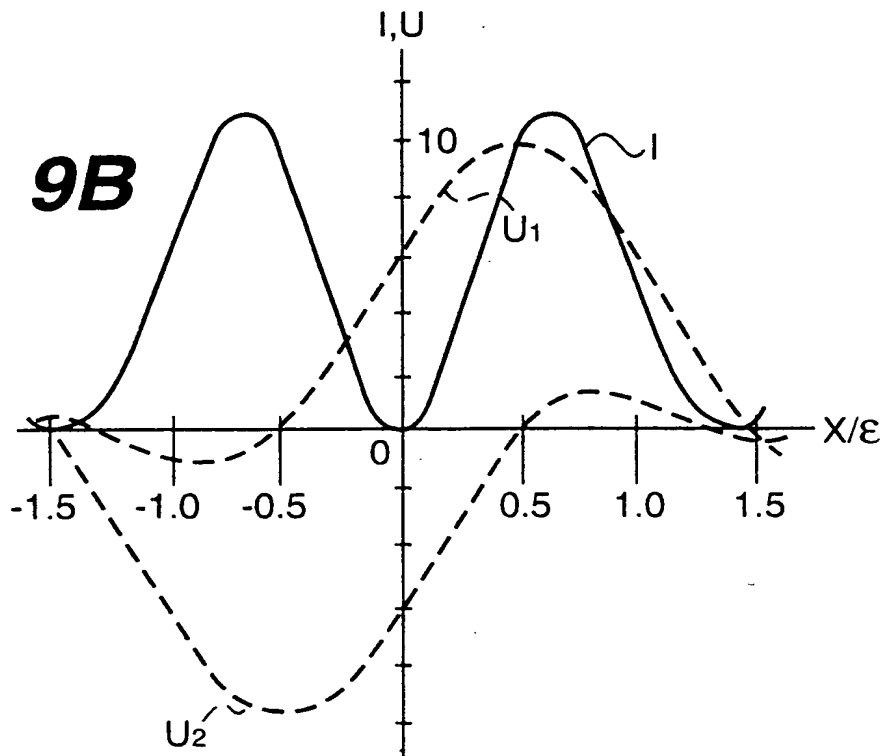
**FIG. 8Q**

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

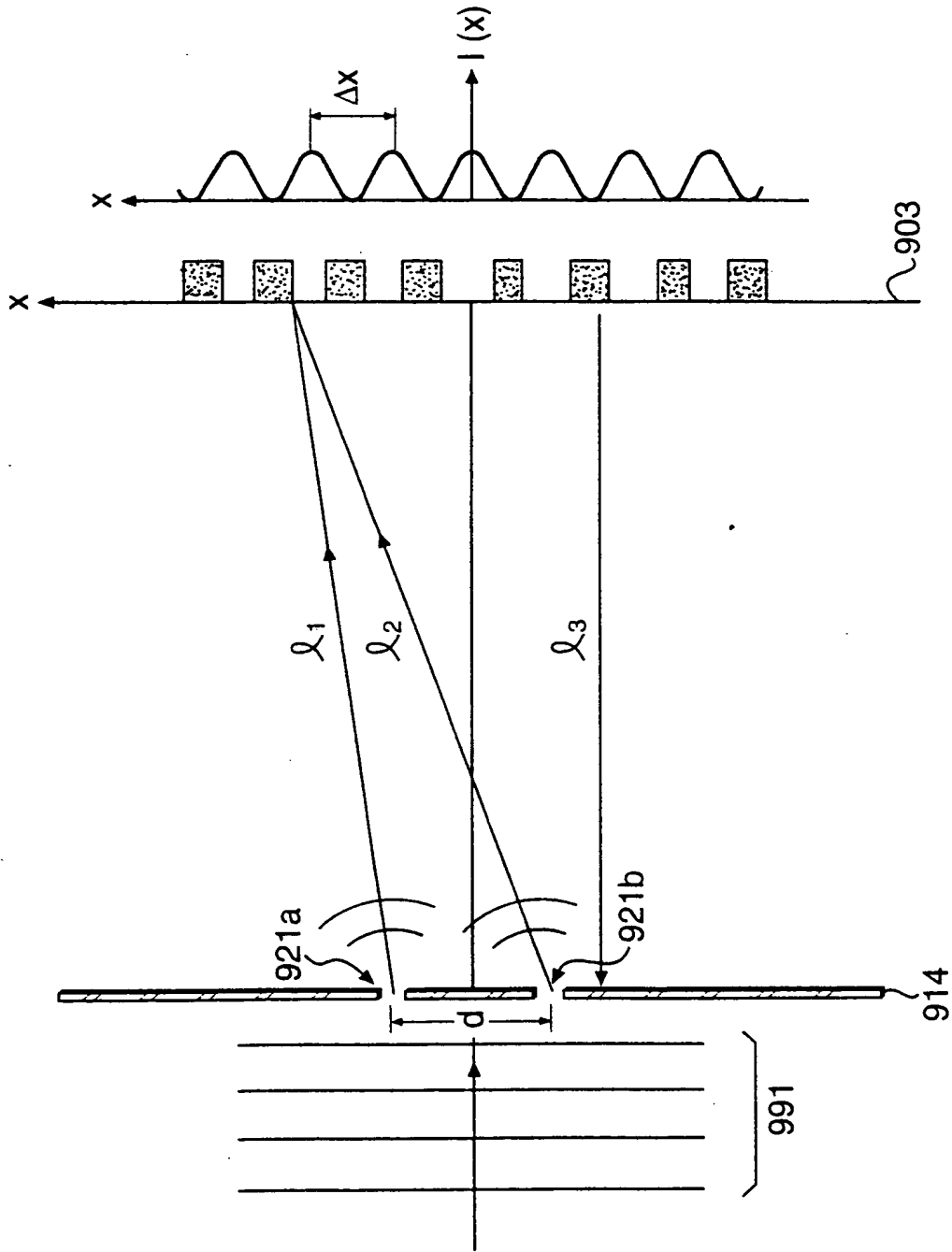
**FIG. 9A**



**FIG. 9B**



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
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**FIG. 9C**

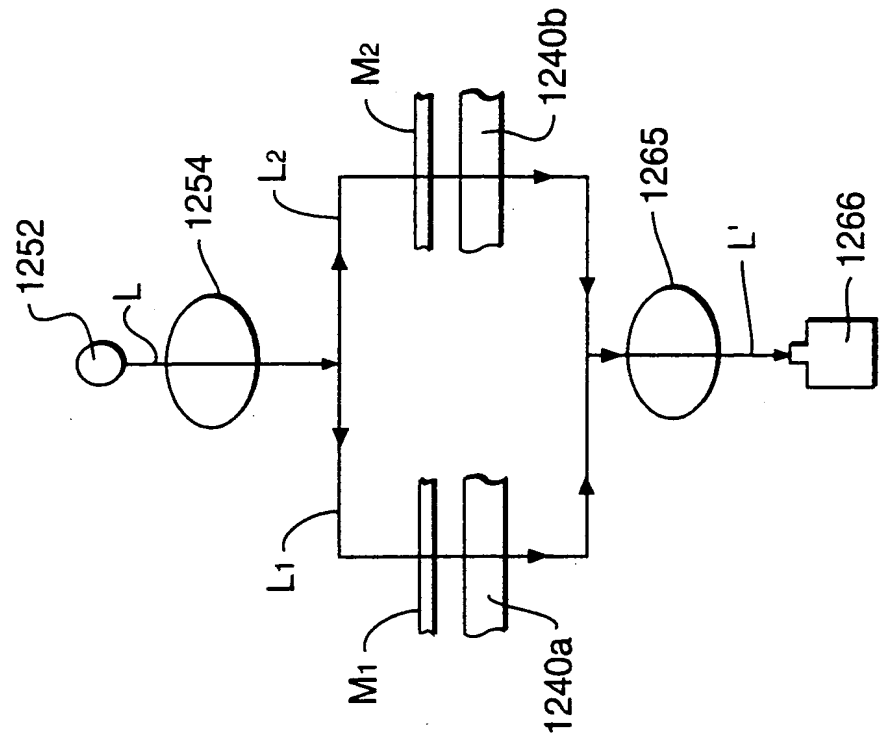
APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

CONDITIONS LINE SOURCE	CENTER WAVELENGTH	BAND WIDTH	PARTIAL COHERENCE	REMARKS
I-LINE OF HIGH - PRESSURE Hg LAMP	365 nm	7~10 nm	0.2~1.1	
KrF EXCIMER LASER	248 nm	ABOUT 0.001 nm	0.2~1.1	DEEP UV REGION
ArF EXCIMER LASER	193 nm	DITTO	0.2~1.1	DITTO

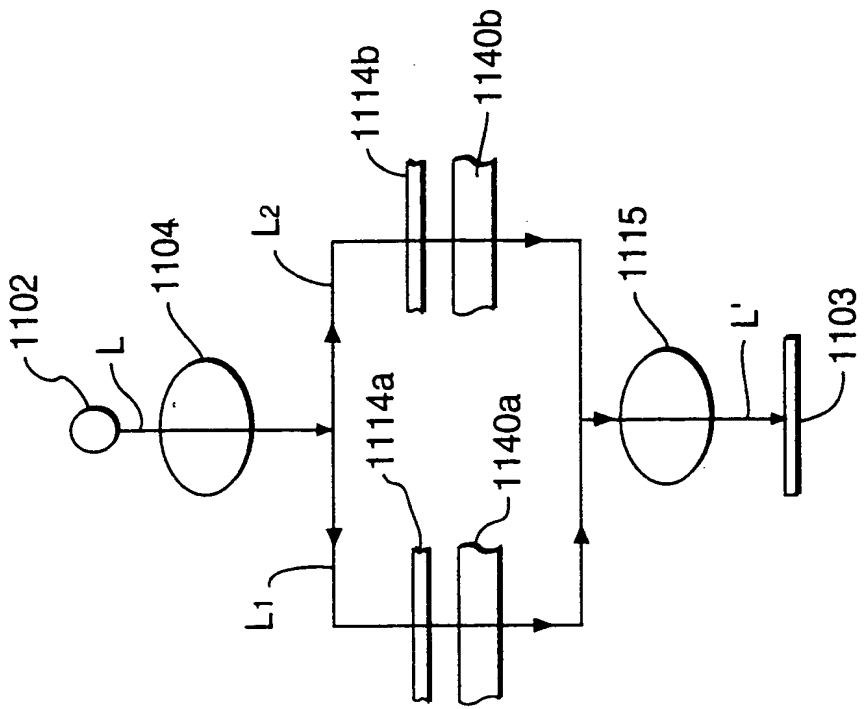
FIG. 10

ABBREV.	CHEMICAL FORMULA	POINT GROUP	TRANSMISSIVE RANGE (μm)
KDP	KH <sub>2</sub> PO <sub>4</sub>	42 m	0.27 ~ 1.7
DKDP	KD <sub>2</sub> PO <sub>4</sub>	42 m	0.2 ~ 1.6
ADP	NH <sub>4</sub> H <sub>2</sub> PO <sub>4</sub>	42 m	0.13 ~ 1.7

FIG. 20D



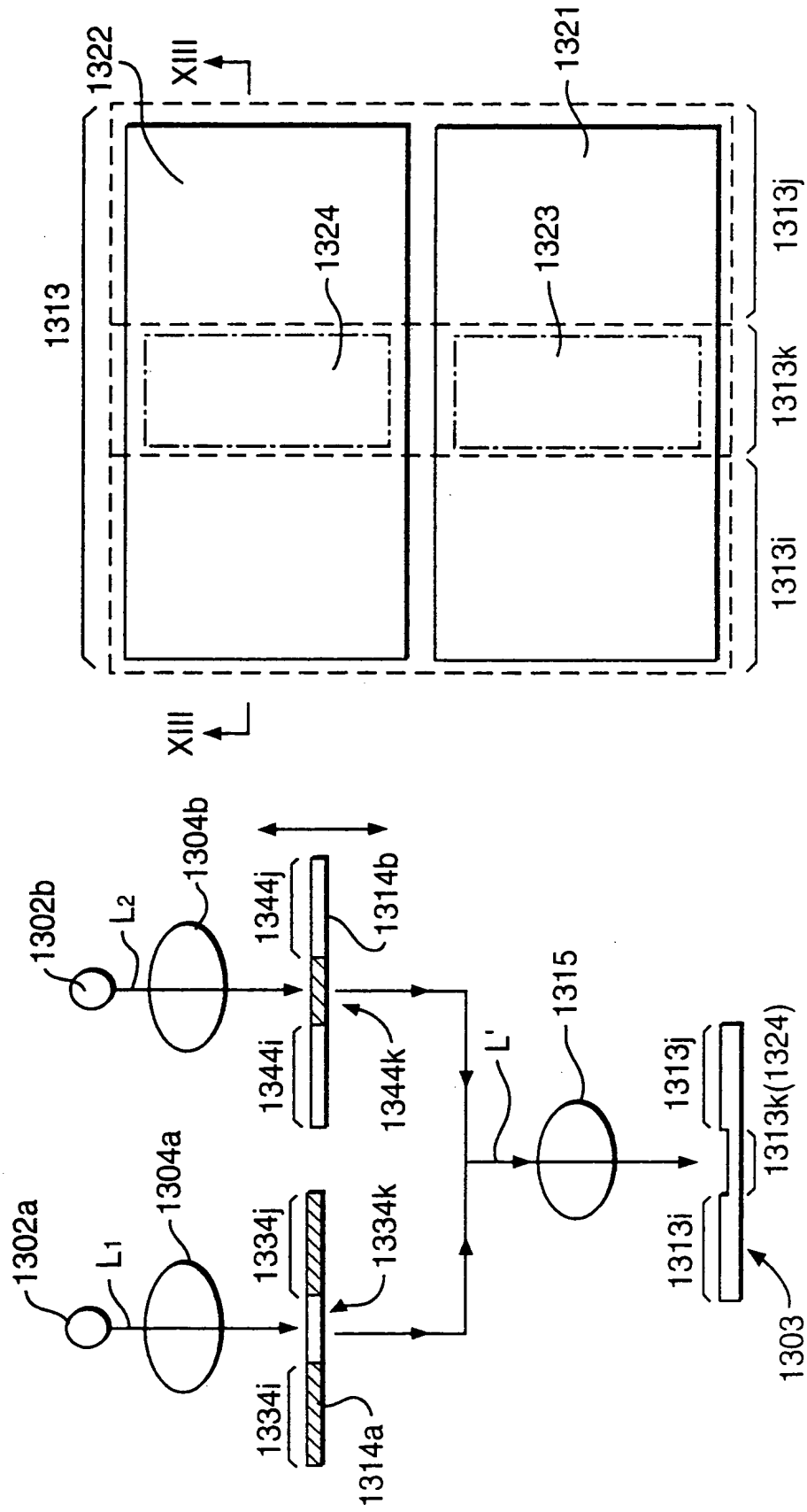
**FIG. 12**



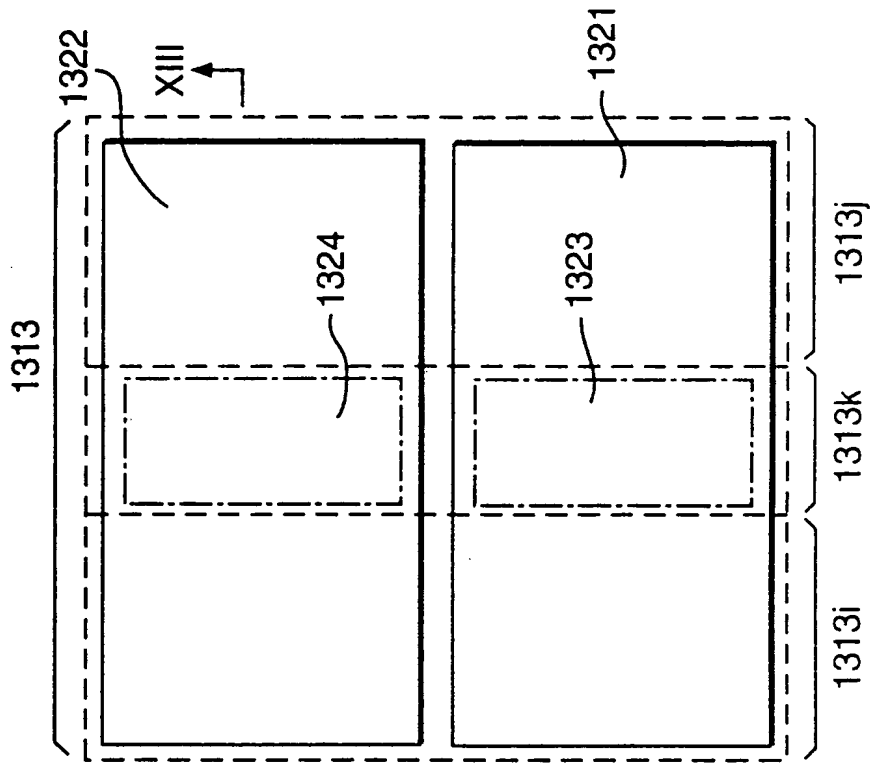
**FIG. 11**



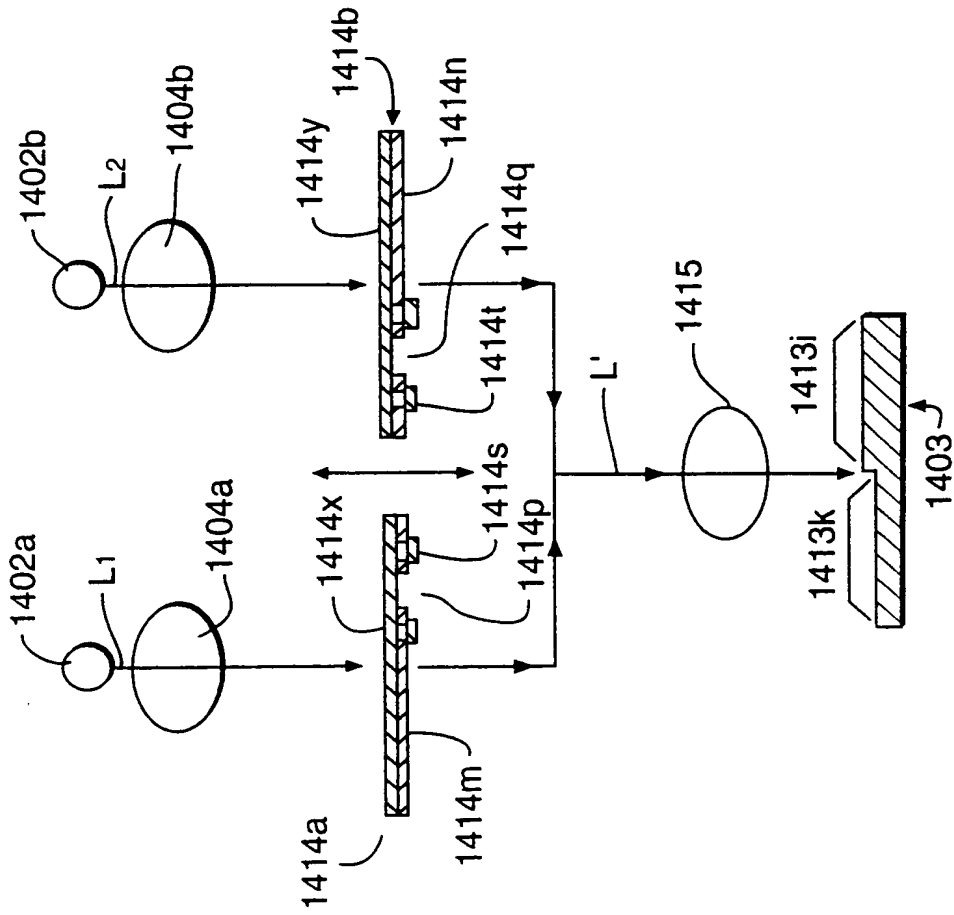
APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		



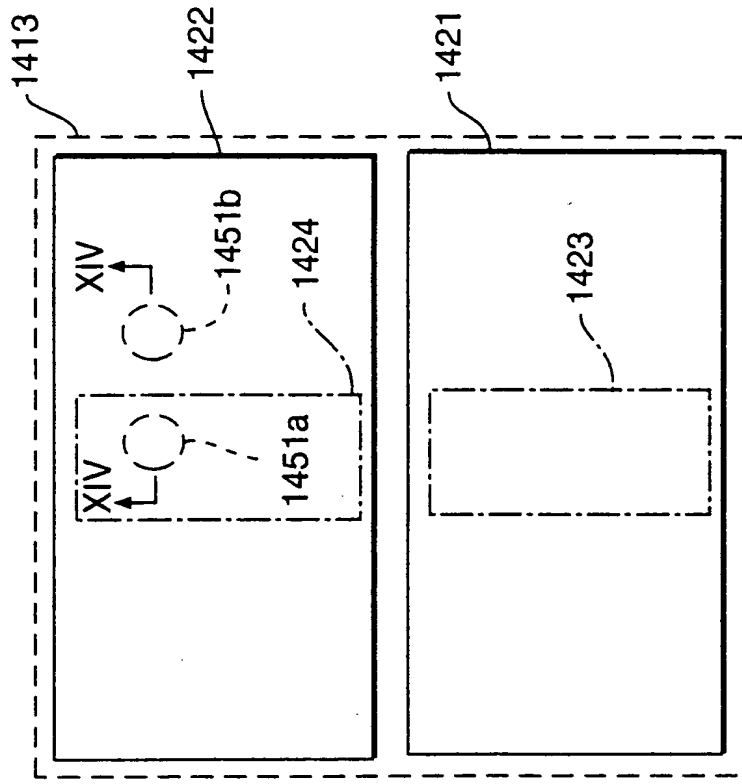
**FIG. 13A**



**FIG. 13B**

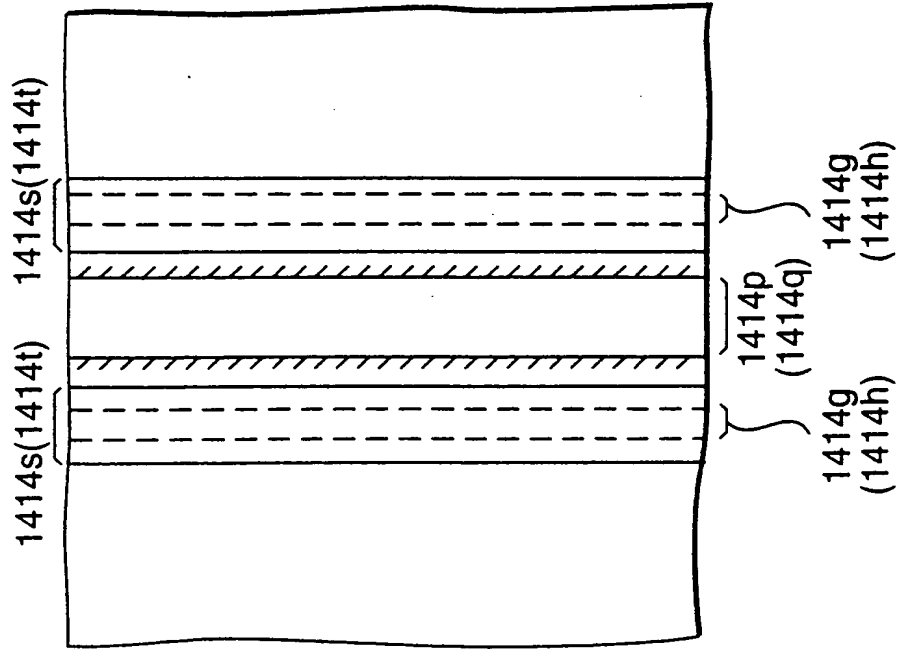


**FIG. 14A**

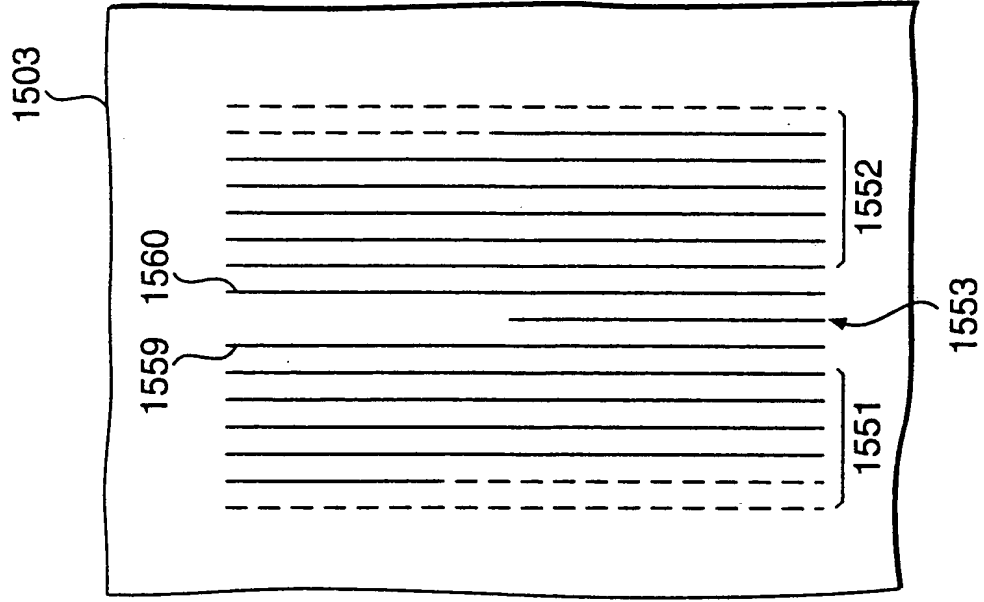


**FIG. 14B**

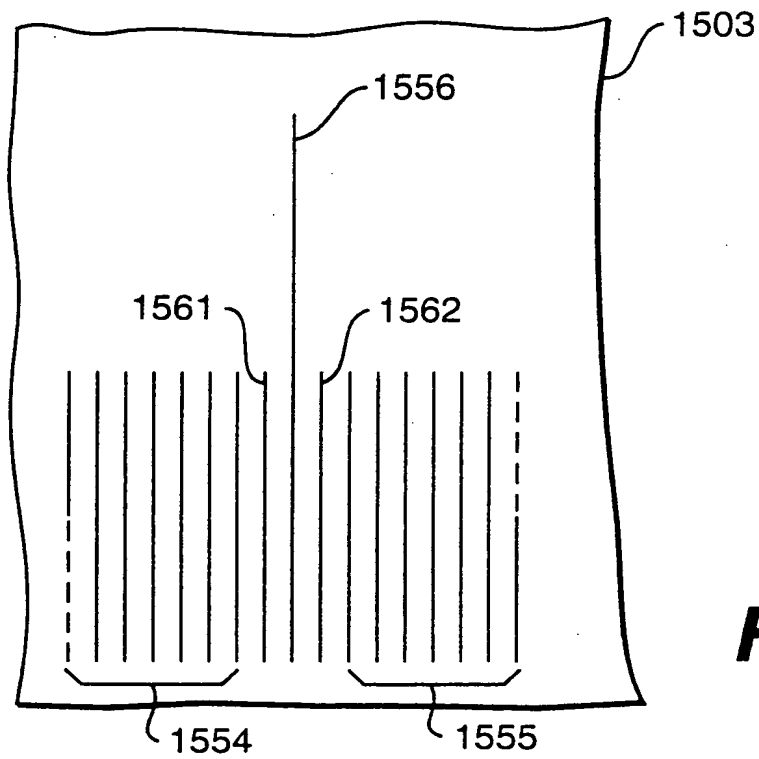
**FIG. 14C**



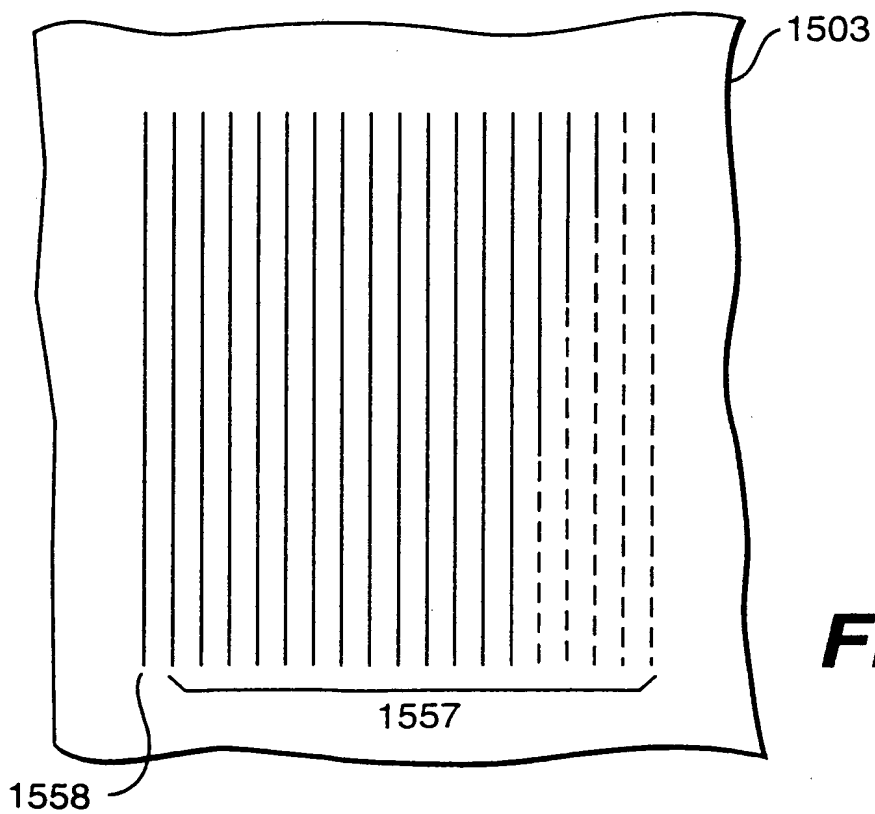
**FIG. 15A**



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		



**FIG. 15B**



**FIG. 15C**

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

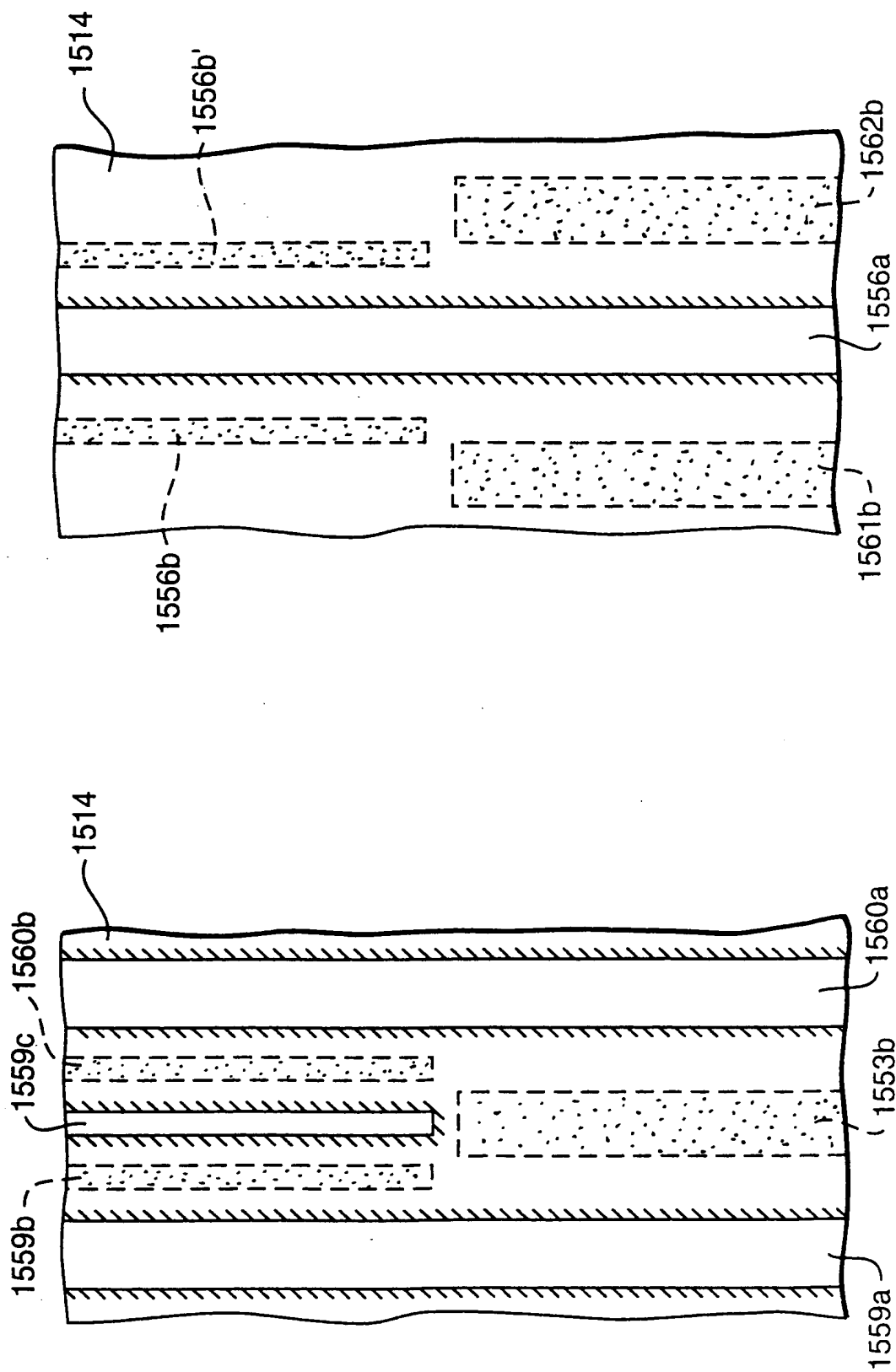
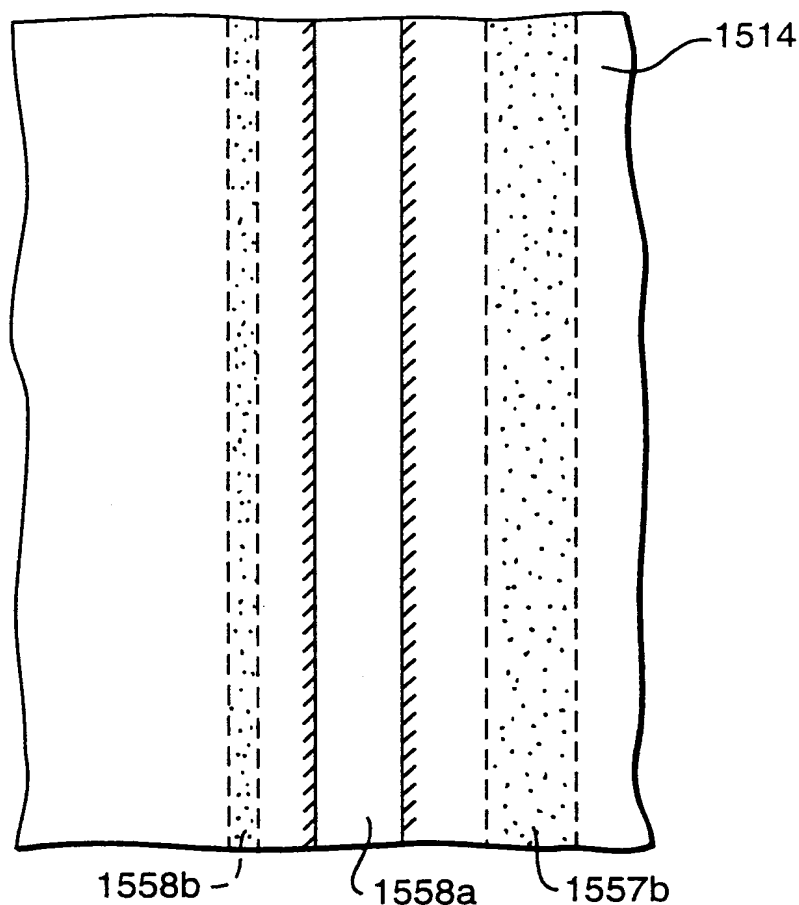


FIG. 15E

FIG. 15D

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

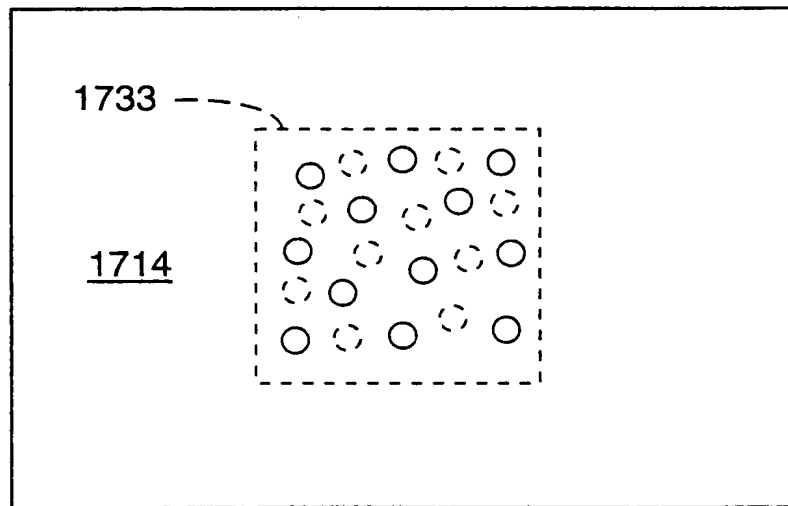
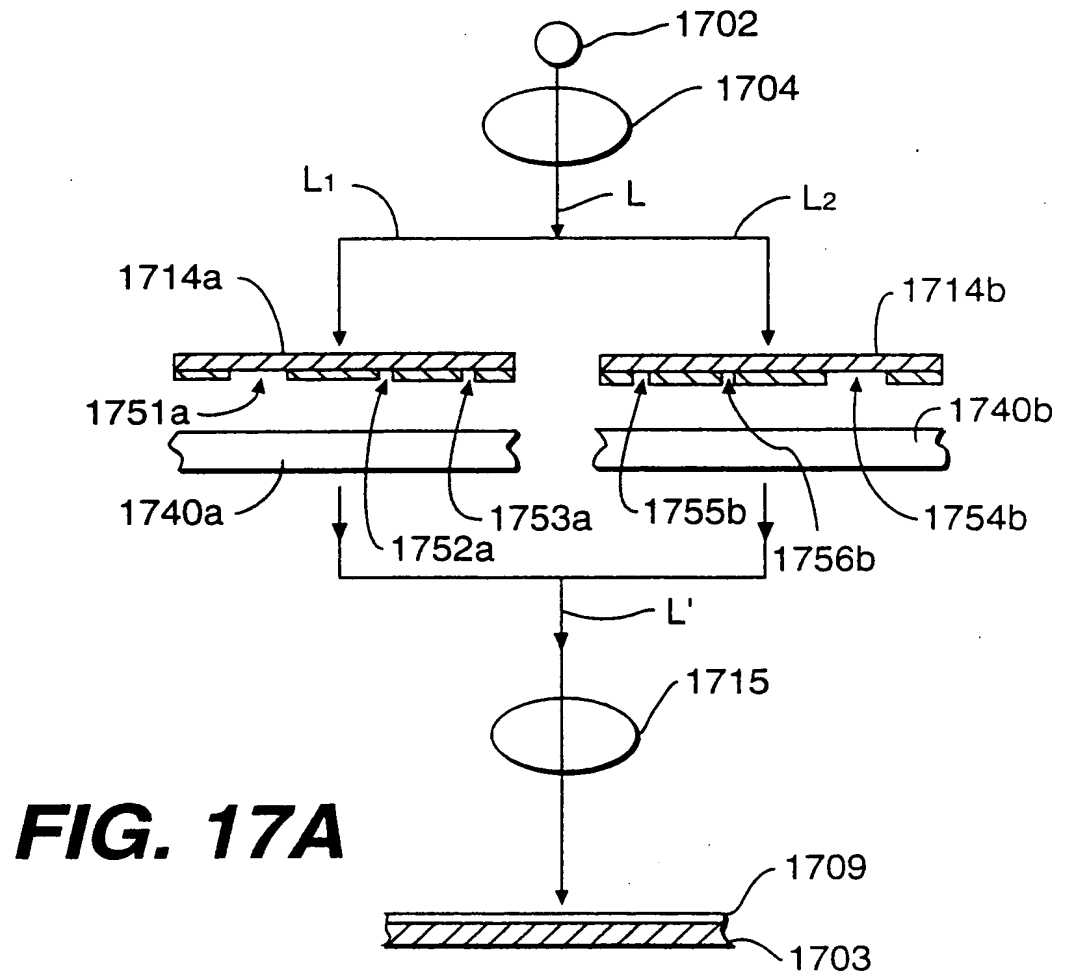


**FIG. 15F**

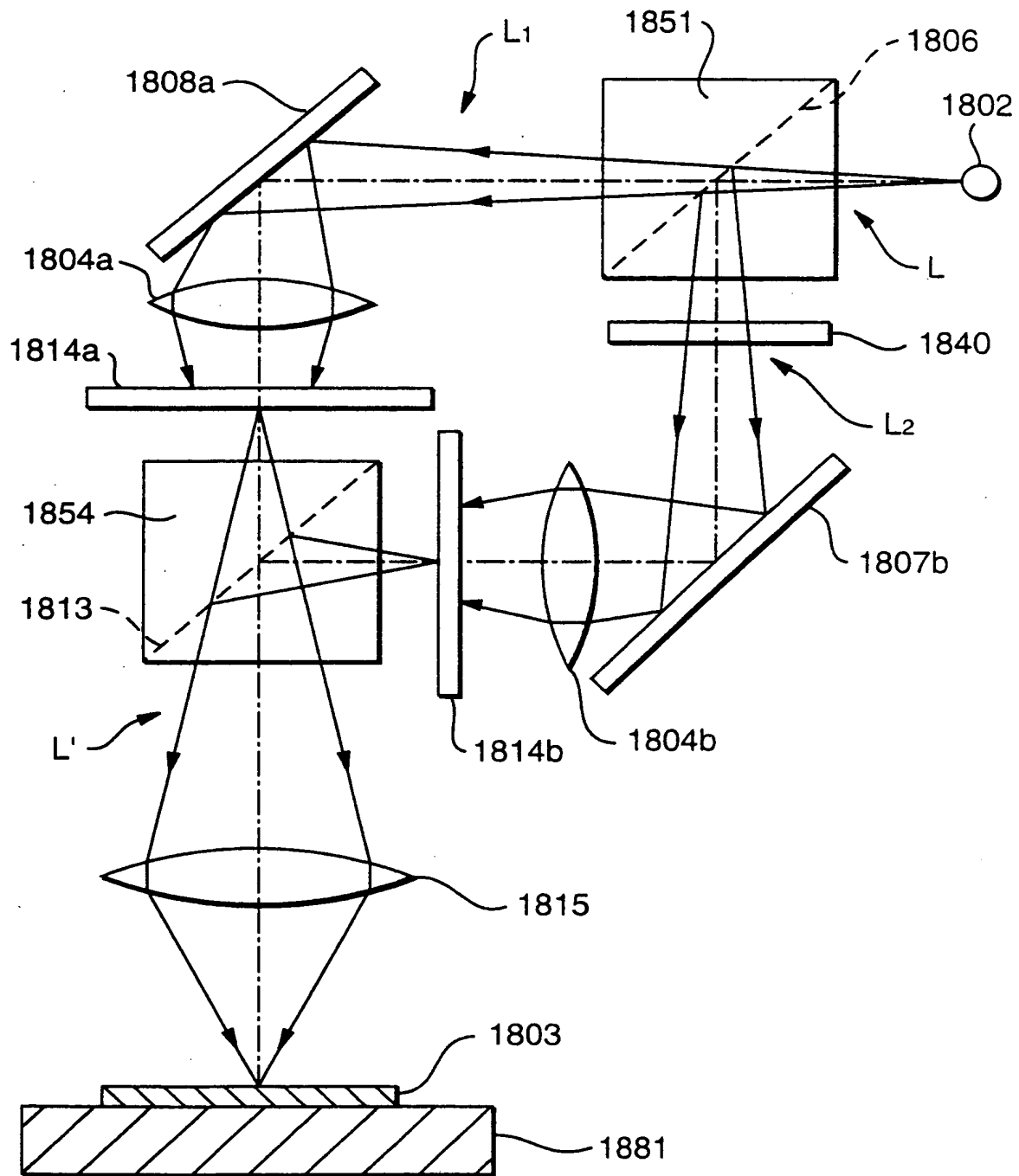
RESIST NAME EXPOSURE BEAM	POSITIVE RESIST	NEGATIVE RESIST
I-LINE (365nm)	① HITACHI KASEI [RAY CAST RI-7000P] ② SHIPLEY COMPANY INC. [TITAN LINE SERIES]	① HITACHI KASEI [RU1100N] ② TOKYO OHKA KOGYO [ONNR20 SERIES]
KrF EXCIMER LASER (248nm)	① POLYMETHYL METHACRYLATE (ABBREV. PMMA) ② SHIPLEY COMPANY INC. (MICROPOSIT)	① HITACHI KASEI [RD2000N] ② FUJI YAKUHIN KOGYO [LMR]

**FIG. 16**

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		



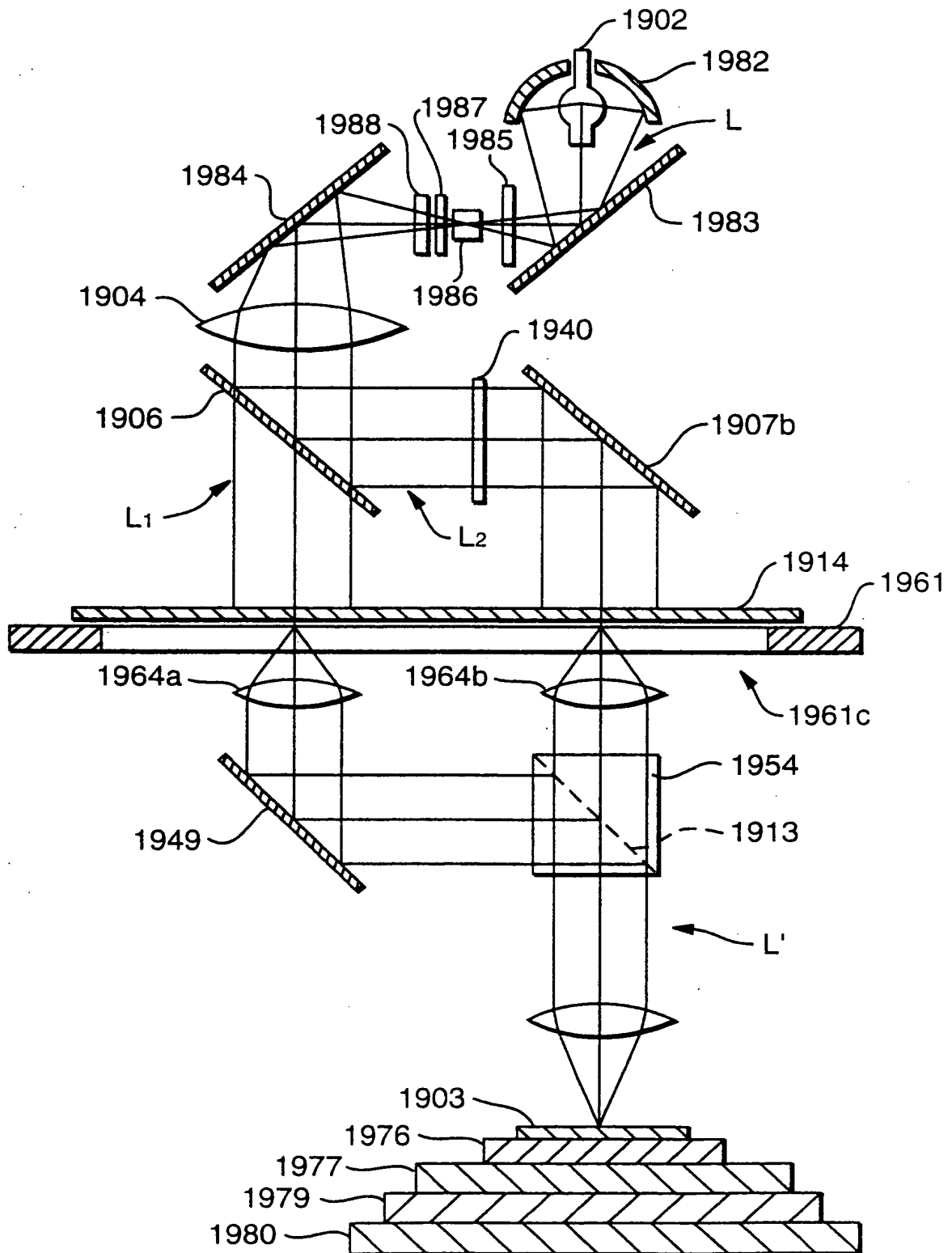
APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		



**FIG. 18**

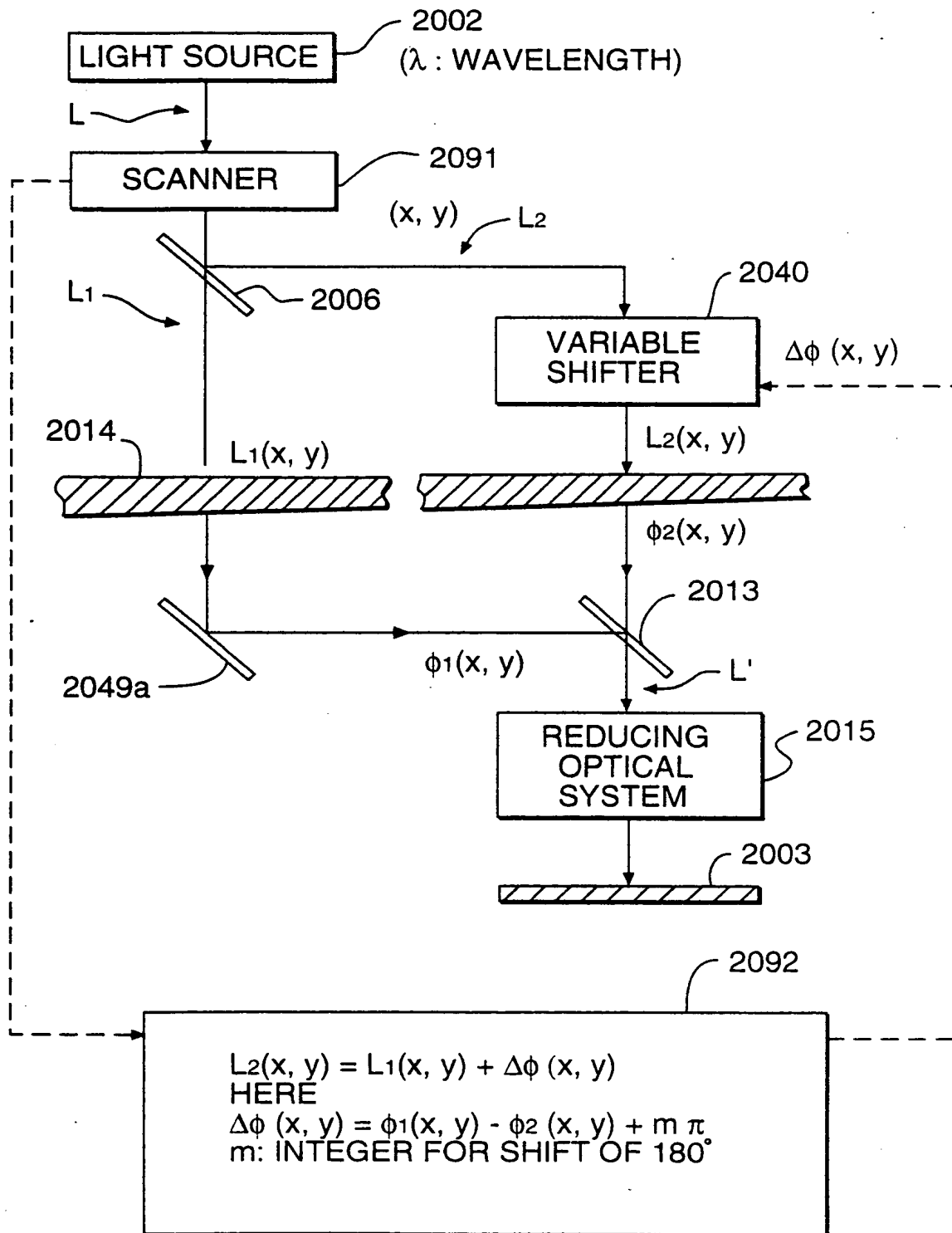


APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		



**FIG. 19**

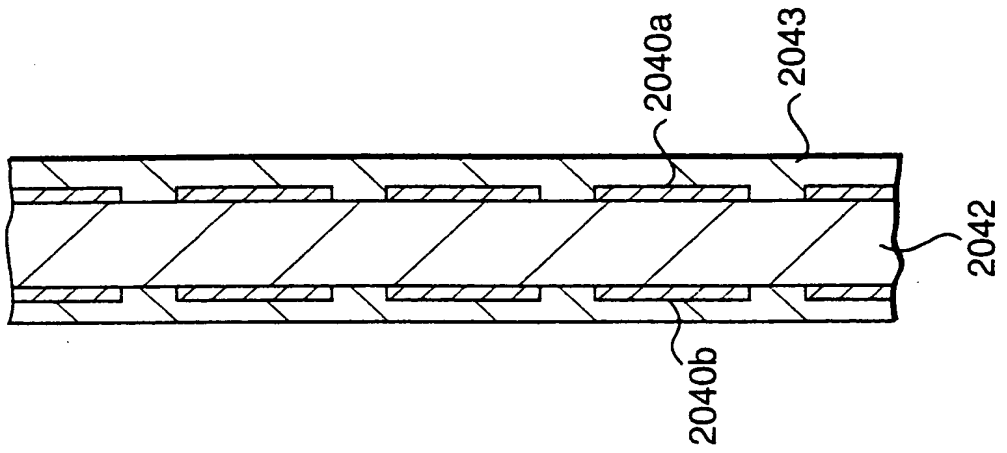
APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		



**FIG. 20A**

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

**FIG. 20C**



**FIG. 20B**

